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**EVALUATION OF THE  
KIBALE FOREST CONSERVATION AND MANAGEMENT PROJECT  
UNDER THE ACTION PROGRAM FOR THE ENVIRONMENT**

**Prepared for**

**USAID/KAMPALA**

**by**

**MANAGEMENT SYSTEMS INTERNATIONAL**

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## ACRONYMS

CA	Cooperative Agreement
EC	European Community
FD	Forest Department
GMU	Grants Management Unit
GOU	Government of Uganda
IUCN	The World Conservation Union
KFP	Kibale Forest Conservation and Management Project
KNP	Kibale National Park
KSCDP	Kibale and Semliki Conservation and Development Project
MISR	Makerere University Institute of Social Research
MOU	Memorandum of Understanding
MU	Makerere University
MUBFS	Makerere University Biological Field Station
MUIENR	Makerere University Institute of Environment and Natural Resources
NGOs	Non-Governmental Organizations
TBA	Tropical Biology Association
UNP	Uganda National Parks
USAID/Kampala	U.S. Agency for International Development, Mission to Uganda
USh	Uganda Shilling
WCS	Wildlife Conservation Society (formerly Wildlife Conservation International, a division of the New York Zoological Society)

## **EXECUTIVE SUMMARY**

### **1.0 Background**

The Kibale Forest Conservation and Management Project was authorized by a cooperative agreement between USAID/Kampala and the Wildlife Conservation Society (WCS), with an effective starting date of 1 April, 1992. The cooperative agreement was signed to continue and expand upon the conservation, research and training activities in and around the Kibale Forest (now Kibale National Park), and to assist the Government of Uganda (GOU) fulfill its mandate to conserve and manage the Kibale Forest. This was to be achieved through five related activities: (1) research, monitoring and training, (2) improved forest management, (3) forest utilization through tourism and other appropriate practices, (4) outreach to local communities, and (5) institutional capacity development of the GOU departments involved with the management of the Kibale Forest.

The primary objective of this evaluation is to assess the progress that the project has made to date, and in particular to consider which elements of the project should be continued in current or modified form. The cooperative agreement is about to expire by mutual consent of USAID/Kampala and WCS, and USAID has expressed interest in supporting appropriate follow-on activities.

This evaluation is based upon reviews of correspondence, project documents and other papers, and interviews with approximately 50 individuals. The team spent three weeks in Uganda, eight days of which were in Kibale National Park (KNP). A detailed account of the team's findings and recommendations is presented in the main body of the report.

### **1.1 Principal Conclusions**

1.1.1 The Kibale Forest Project has had an ambitious agenda to help develop Ugandan capacity to manage the Kibale Forest (now Kibale National Park) and to nurture the continued development of the Makerere University Biological Field Station (MUBFS). Supported with substantial USAID/Kampala funding, the project has been well-justified by the valuable history of research at MUBFS and by the considerable potential for the station to develop into the premier African center for research and training in forest biodiversity conservation and management; by the substantial but largely unrealized potential for primate and forest-based ecotourism in Kibale that could benefit both park management and local communities; and by the clear need for technical assistance to help local communities derive measurable benefits from the intact forest. However, the project's implementation has been thwarted by numerous constraints: among them, very poorly defined and increasingly difficult relationships between cooperating institutions and project personnel, limited financial administration provided by WCS, slow disbursement of USAID funds to the project, early departures of personnel from key project positions with very slow replacement, turnover in Ugandan institutional authority over the forest, and limited financial and institutional investment in the field station by Makerere University.

1.1.2 Despite these considerable challenges, several significant project objectives have been achieved:

- Substantial infrastructure development at MUBFS, enhancing its capacity to serve as a center for tropical forest science research and training.
- Increased levels of applied conservation research and training at the station, with

moderate participation of Ugandan students and scientists.

- In and out park tourism development in place with demonstrable economic benefits to local communities.
- Markedly increased local support for forest conservation.

1.1.3 The imminent withdrawal of WCS from the KFP Cooperative Agreement poses a critical challenge to the future of USAID support for research, training, conservation and outreach at Kibale National Park. What should be supported, and how should that support be implemented? While this evaluation has focussed on assessing the strengths and weaknesses of the Kibale Forest Project, the evaluation team also considered follow-on efforts to encourage biodiversity conservation and sustainable development in and around Kibale.

## **1.2 Key Recommendations**

The following are the team's major recommendations for follow-on activities at Kibale. These and other recommendations are more fully elaborated in the summary chapter (Chapter 7) and in other sections of the report.

1.2.1 USAID/Kampala should continue to support the development of Kibale National Park and the Makerere University Biological Field Station.

1.2.2 USAID should support (a) training, infrastructure development, research and community environmental education at MUBFS, and (b) capacity-building for Uganda National Parks to sustainably manage Kibale National Park and develop support for the park in buffer-zone communities. These should be treated as discrete activities and probably funded through two separate institutions.

1.2.3 During the no greater than 12 month bridging period, USAID funding for MUBFS should focus on basic station infrastructure improvement, continuity of field courses and improved coordination of research and training objectives with KNP.

1.2.4 Makerere University (MU) should strengthen its financial, technical and administrative support for MUBFS.

1.2.5 Beyond the bridge, Makerere University should form a consortium with one or more qualified universities and possibly conservation NGO's to operate MUBFS for the next several years.

1.2.6 The consortium should appoint one person as MUBFS director, with a strong technical background, significant international experience, and substantial management and leadership skills.

1.2.7 Greater efforts should be made to increase participation of Ugandan and other African students and scientists in MUBFS research and training.

1.2.8 MU and UNP should develop an Memorandum of understanding that guarantees the continued development of MUBFS as a center for both basic and management-oriented research and training.

1.2.9 UNP should immediately begin preparing a Kibale National Park management plan.

1.2.10 Beyond the bridge, USAID support for KNP should be provided to UNP in collaboration with an NGO with technical expertise in forest park management and community-based tourism/environmental education.

1.2.11 A senior technical advisor to KNP with park management and nature tourism development expertise should be provided through follow-on project activities.

1.2.12 USAID should continue to support community-based tourism in and near Kibale.

1.2.13 Support should be provided for increased KNP protection and monitoring of wildlife in the former game corridor between Kibale and Queen Elizabeth Park.

1.2.14 USAID should support IUCN activities that seek to reduce human pressure on the Kibale National Park through the involvement of local communities in sustainable resource management.

### **1.3 Lessons Learned**

As a consequence of our experience evaluating this project, the team has developed three general "lessons learned" that are presented for consideration for both the implementors of follow-on work at Kibale and a wider audience. It is hoped that they will be the basis for constructive dialogue by all relevant parties.

1.3.1 All grants and cooperative agreements, and particularly those involving NGO's, need to have in place an administrative unit with sufficient expertise to handle the project's financial and management oversight requirements. These should be anticipated by the grant's size and complexity. If such capabilities are lacking, then the grantor should expand the project to include such a unit. Further, the grantee should be strongly encouraged to establish a country representative where none exists to handle projects of significant size and complexity.

1.3.2 Regardless of the desirability of funding an activity, no grant should be made until adequate management systems of both the grantor and grantee are ready to be put into place. Missions should not attempt to internally manage a grant without sufficient staff; if numerous, similar grants are anticipated, then it is highly appropriate to develop a grants management unit.

1.3.3 A clear and common understanding on the part of both the grantor and the grantee of the interpretation of USAID "substantive involvement" is critical. This should be established through dialogue and negotiation at the outset of Cooperative Agreements. Missions should allow grantees considerable leeway in selecting qualified personnel while maintaining high standards of accountability with respect to project performance and output.

## **2. INTRODUCTION**

### **2.1 Purpose of the Evaluation**

The Cooperative Agreement (CA) between USAID/Kampala and the Wildlife Conservation Society (WCS, formerly Wildlife Conservation International) was signed to continue to expand upon the conservation, research and training activities in and around Kibale Forest, and to assist the Government of Uganda (GOU) to fulfill its mandate to conserve and manage the Kibale Forest to the best of its abilities. This is to be achieved through activities in five principal sectors:

- Research, monitoring, and training in key areas and subjects;
- Improved forest management;
- Forest utilization through tourism and other appropriate practices;
- Outreach to local communities through forestry extension and conservation education;
- Institutional capacity development of the GOU institutions and NGO's involved with the conservation and management of the Kibale Forest.

The evaluation will:

- assess the progress that the project has made to date towards achieving the project objectives
- assess constraints that may limit effectiveness of the project
- make recommendations for future modifications
- assist the Mission to determine the most efficient and effective means to manage any continued assistance to the Kibale Forest Project.

### **2.2. Project Description**

The Cooperative Agreement between Wildlife Conservation Society and USAID, Contract No. 617-0124-G-00-92-02, is the result of an unsolicited proposal by WCS to USAID to continue and expand research, conservation and development activities in and around Kibale Forest Reserve begun under a previous Biodiversity Grant, which terminated in December 1991.

Five major areas of focus were contemplated by the WCS proposal: research, monitoring and training; improved forest management; forest utilization through tourism and other appropriate practices; outreach to local communities; and in the field, institutional capacity building of the Forest Department and Makerere University Biological Field Station (MUBFS), the two Ugandan institutions most involved at that time with the Kibale Forest. Funding was approved for 4 million dollars.

Major events and situations that have characterized the implementation of the CA:

1. USAID/Kampala's interest in Kibale led to their considering and eventually funding an unsolicited proposal to maintain and extend the work supported under the Biodiversity Program grant. The new CA had annual funding for almost ten times the previous grant but took longer than anticipated to fund. In an effort to partially offset the problems caused by the delay, USAID made significant local

currency (PL480) funding available but WCS also had to use funds intended for other projects to keep minimum activity ongoing. Once the CA was signed, the first disbursement was apparently made within a reasonable time frame. Subsequent disbursements were slow; this may have reflected growing concern by USAID/Kampala with project financial administration. However, the Team found few indications that marked concerns were effectively communicated to the grantee until the Project Manager requested a financial assessment.

2. The Project Manager position was not filled until March 1993 following extensive dialogue between the two CA partners concerning the qualifications of candidates for the position.

3. The MUBFS component of the Project, from CA commencement, was to include two Co-Directors, one representing Makerere University, and the other WCS. The WCS appointed Co-Director left the project abruptly in June 1993. The first nominee for his replacement was approved quickly but was not available for over six months. A very lengthy search for another replacement was characterized by strong differences of opinion between USAID/Kampala and WCS over the qualifications of WCS-nominated candidates and over the appropriate role of each CA partner in the selection process. A replacement was approved by USAID/Kampala in June 1994, but he has not taken the position.

4. The Outreach Program, begun under the Biodiversity Program grant, was quite successful at improving conservation awareness among some local communities. However, the Outreach Program Coordinator left the project in October 1993; her Ugandan counterpart died in January 1994 following a short illness. Neither have been replaced.

5. Most Outreach and Extension activities of the project have been effectively handed over, as planned in the CA, to the IUCN Kibale and Semliki Conservation and Development Project in 1994. However, formal handing-over has not yet occurred. IUCN is also taking care of surveying and tree planting of the Kibale National Park boundary.

6. The KFP worked fairly well with Forest Department personnel. Kibale Forest was reclassified as Kibale National Park in November 1993, with management responsibility being transferred from the Forest Department to Uganda National Parks. This change caused significant delays in and changes of focus of some components of the project and is still the source of some conflict. The size of this protected area increased from 560 sq. km. to 766 sq. km. as the Game Corridor between the Forest Reserve and Queen Elizabeth National Park was added to the new national park.

7. A tourism site, Kanyanchu, has been successfully initiated in KNP by the KFP. Management of the tourism program, essentially development of the Kanyanchu tourism site, shifted from the volunteer group Frontier to MUBFS in June 1993; it was subsequently passed to the UNP Warden in Charge effective May, 1994. Associated community-based tourism at Bigodi has been quite successful to date at improving the local economy.

8. An audit carried out in November, 1993 of project expenditures resulted in 23 recommendations, and cited several serious deficiencies in project bookkeeping and accounting procedures. Some funding was unaccounted for by adequate documentation. Most of the problems encountered by the audit have been cleared up, but some remain. (see Section 3.1, Conclusion # 4).

9. The Project Manager has recruited an administrative cadre within the project, in part in response to administrative shortcomings detected before the audit. However, Makerere University has yet to name

a Senior Administrator for MUBFS, as is called for in the CA.

10. Makerere University has funded two staff lecturers for the field station. The CA also called for the University to fill 4 additional positions at MUBFS (in addition to the Botanist and Zoologist): in forestry, agroforestry, sociology and as well as a Field Station Administrator. While a forester was named, his stay at MUBFS was short-lived. The other positions remain unfilled.

11. The CA provided \$200,000 annually for priority research areas. A MUBFS Research Subcommittee was established to identify these priorities, and receive, evaluate and disburse funding for approved proposals. The Project Manager reports that a total of \$263,000 was disbursed between 1992 and 1994. The majority of that money was disbursed to expatriate researchers.

12. In a letter from the WCS Director to USAID/Kampala in June 1994, WCS expressed its desire to withdraw from the CA due to differences with USAID concerning the Project's management and administration, including perceived USAID micromanagement of Project technical matters and hiring of project personnel, delays in the allocation of funding, and general deficiencies in communication between the USAID mission in Kampala and WCS headquarters in New York. USAID requested a three-month phase out plan, but up to the period of the evaluation, this has not been provided by WCS. WCS reports that funding to maintain minimum Project operations is available until December 31, 1994.

13. USAID is currently planning for a bridge funding mechanism to cover a period of up to 12 months that is perceived necessary to arrange a follow-on project for Kibale. Although not specified in the terms of reference, USAID/Kampala personnel have emphasized the importance of this evaluation in determining priorities for funding during the bridge and for the future project.

## **2.3 Background**

### **2.3.1 Legal and Management Status**

The Kibale Forest obtained its first legal status when it was gazetted a crown forest in 1932. It became a Forest Reserve in 1948, and later, after consolidated gazettement in 1963, officially covered 560 sq.km. Two areas within the forest were declared nature reserves and another was designated as a research plot. A game corridor, managed by the Game Department, connected Kibale to Queen Elizabeth National Park to the south. During the conflicts of the 1970's and 80's, the game corridor was settled by several thousand people, who were dislodged and resettled in 1992. The original objective of the forest was to provide for sustained harvesting of softwood plantations and hardwood timber. Management and logging practices were not carried out optimally, however. Selective logging and clear cutting have occurred in varying degrees in perhaps 50% of the Reserve. In 1992, the Forest Department, believing a higher conservation status would improve funding opportunities, proposed raising the status of the Reserve to Forest Park, still permitting logging of the softwood plantations. In November 1993, the Forest Department lost control of the forest when it was declared a national park, under the jurisdiction of Uganda National Parks, a parastatal attached to the Ministry of Tourism, Wildlife and Antiquities. After several months of management vacuum between Forest Department and UNP administration, UNP finally established a viable though incipient park administration of Kibale Forest, including the game corridor within its national park boundaries.

### **2.3.2 The Resource**



The Kibale National Park includes one of the best remaining examples of a medium altitude tropical moist forest ecosystem in East Africa. About 60% of the originally gazetted Forest is covered by tall forest with the canopy generally 25-30 meters in height. The remainder is comprised of a mosaic of papyrus swamp, grassland, plantations of pine and cypress, thicket, colonizing forest and encroached farmland, particularly in the game corridor.

Over 325 species of birds have been recorded at Kibale, 58% of them considered to be true forest birds. But what has made Kibale famous is its rich primate fauna. Twelve species have been identified, and they are found at one of the highest densities ever recorded. Since they are not hunted, they are relatively easy to observe. Other animals such as elephants, cape buffalo and duiker are found in the forest, some of them typical of savannah ecosystems, reflecting the game corridor which links Kibale with Queen Elizabeth National Park to the south.

### 2.3.3 Research

In 1971, Tom Struhsaker, a researcher with New York Zoological Society (now WCS), came to Kanyawara, a Forestry Station located to one side of the research plot in Kibale Forest Reserve. He initiated a research program which became known as the Kibale Forest Project. Struhsaker continued to do research and direct the Project until 1987. During his time at Kibale, the field station fostered a number of Ugandan and foreign Ph.D. and Masters theses on primates, rodents, forest ecology, insects and others. Following Struhsaker's departure, Gary Tabor, a WCS research fellow, took over as acting station director until late 1988. In 1988, WCS formally transferred the field station to Makerere University, and it became the Makerere University Biological Field Station (MUBFS). WCS researcher Andy Johns followed Gary Tabor as WCS Co-director from early 1989 until 1993.

MUBFS has acquired an international reputation as one of the most important research stations in the world for basic and management-oriented research and training in tropical forest ecology, and the premier station in Africa (see Section 4.3). This is due primarily to the long history of high-profile station-based research, the growing use of the station by international training courses, and the accessibility of the station and the forest for research and training purposes. In the past, research focussed primarily on basic studies of primate and tropical forest ecology but included a considerable body of applied studies emphasizing the effects of logging on forest fauna. Under the Cooperative Agreement, a Research Subcommittee has been established to guide research activity at MUBFS, including the allotment of Cooperative Agreement funding destined for research at Kibale. Recently developed research priorities place a greater emphasis on basic inventories, long-term forest monitoring, and socio-economic/ecological studies. This last priority reflects increased human pressure upon the forest and the need to understand forest/human relationships in order to better manage the forest and other ecosystems within the National Park.

### 2.3.4 International Assistance

Aside from WCS support of Tom Struhsaker's work in Kibale dating from 1971, and WCS support of two Makerere senior researchers at MUBFS, significant international assistance did not begin until 1989 when WCS received a USAID Biodiversity Grant for \$247,000. The USAID Biodiversity Grant terminated in December, 1991. Funding from this source was used to support research, particularly on topics of forest regeneration and animal crop raiding, in addition to salaries and equipment for implementing tree planting, environmental education and other extension activities and the initiation of tourism work at Kanyanchu. At about this time the EC also contributed a significant amount of

funding which was used primarily for construction of new buildings: dormitory, laboratory, administration block, and refectory. (MUBFS historically had rather primitive facilities --5-10 mud/tin buildings and no electricity or running water. Through USAID, EC and WCS funding, it now has dormitories for 28 students, duplexes or small houses for guests and long-term researchers, a library, a laboratory, and administrative offices. Water supply and electricity are still particularly problematic, however, the latter being provided by a combination of solar and diesel generator.)

USAID/Kampala's interest in Kibale led to their funding an unsolicited proposal to maintain and extend the work supported under the Biodiversity Program grant. The new CA had funding almost ten times the previous grant but took longer than anticipated to fund. In the interim, supplementary local currency funding (PL480) and WCS funds were used for construction purposes and to support some research. While the cooperative agreement was to last for five years, disagreements between WCS and USAID on a number of issues brought about WCS decision to withdraw from the CA before its termination, presumably at the end of December, 1994. USAID plans to continue funding biodiversity conservation activities at Kibale.

### 3. MANAGEMENT ISSUES

- 3.1. *Look at the formal and informal institutional relationships that exist between the Makerere University Biological Field Station (MUBFS), Makerere University, the Kibale Forest Project, the Wildlife Conservation Society (WCS), the Forestry Department, Uganda National Parks, the Grants Management Unit (GMU), and USAID/Kampala. This will include, but not be limited to, how the separate institutions interact and communicate, any resultant impacts on the overall implementation of the Kibale Forest Project and/or MUBFS activities, and if necessary, identify steps to be taken to improve any existing or perceived institutional problems.*

#### Findings

1. **Wildlife Conservation Society (WCS) - Makerere University (MU).** In 1988, after more than 10 years of cooperative research and training activities in Kibale Forest by the New York Zoological Society - Wildlife Conservation International (now WCS) and Makerere University Departments of Zoology, Botany and Forestry, WCS and MU agreed in a Memorandum of Understanding (MOU) to establish a Biological Field Station. The MOU was renewed once and then allowed to lapse, Although a new draft has been prepared, the Field Station continues to operate under an informal agreement according to the old MOU. It is not at all clear that the expectations of the two parties regarding staffing and funding by MU coincide. Agreements concerning funding and staffing of the Field Station by the University have not been implemented.

2. **Makerere University (MU) - Makerere University Biological Field Station (MUBFS).** According to the MOU between MU and WCS, MUBFS is wholly a part of MU. It has formal linkages through the MUBFS management committee with several MU departments (Zoology, Botany, Forestry, Geography and Veterinary Medicine) and semi-autonomous institutions (MUIENR, MISR). MU provides salaries for two lecturers in the Departments of Zoology and Botany who are in residence at the station throughout about 50% of the year as MUBFS Co-director and Senior Researcher, respectively.

3. There appears to be no direct financial investment on the part of MU into the running of the field station. In addition, the inputs of several MU departments and institutions on the management committee with respect to research and training and management oversight of the field station appear to be very limited. This limited investment reflects, in part, the currently amorphous formal linkage between MUBFS and MU administrative structure.

4. There is some discussion of formally linking MUBFS to MU as a semi-autonomous institute.

5. **WCS - MUBFS.** WCS has played a key leadership role in the development and continued operation of MUBFS. WCS financial and technical input includes direct funding for Ugandan researchers, long-term technical support and some infrastructure development. WCS has also be responsible for soliciting and acquiring international donor support from the EC and USAID.

6. **WCS/Kibale Forest Project (KFP)-USAID.** The present Cooperative Agreement between USAID and WCS constitutes a continuation and expansion of conservation activities carried out under a previous 2 year Biodiversity Project grant. The KFP is a sub-project of the USAID/Kampala Action Program for the Environment Project.

7. The KFP expanded the annual level of expected financial support about ten times what was received under the Biodiversity grant. The utilization of these funds was to be achieved with the addition of a Project Manager and an accountant to assist with the administrative work. There were considerable delays in the hiring of these staff.
8. The KFP also constituted a major expansion in the scale of activities to be carried out, some of which were not activities with which the MUBFS-WCS Co-Director and WCS as an institution had significant experience and expertise, particularly project administration and management and community outreach.
9. The design of the KFP as described in the Cooperative Agreement is not particularly clear. The project is composed of four major and distinct activities with only implied linkages between them. The project hired Co-Director is only responsible for activities in MUBFS; the relationship between the project Co-Director and the Makerere Co-Director is not defined. The KFP-hired Project Manager is responsible for the other three major activities of the Project, as well as oversight of KFP assistance to MUBFS; there is no guidance regarding the relationship between the KFP Manager and the two MUBFS Co-Directors. There is no clear articulation of staff roles and responsibilities for project implementation and finances, or decision-making authority in the absence of key personnel. The team views this as an incompletely designed project.
10. Strong differences between USAID and WCS over candidate qualifications and the appropriate role of USAID in becoming "substantively involved" in hiring decisions resulted in lengthy delays in the filling of the new Project Manager's position and the replacement for the WCS MUBFS Co-Director, following Andy Johns' resignation in June 1993. The team believes that the grantee, funded by USAID on the basis of its technical qualifications, should have been given far greater latitude in the selection of key project personnel.
11. Frustrations over the above and other events led to a gradual deterioration in the relationship between the grantor and the grantee, culminating in WCS's decision to withdraw from its role in the CA.
12. One source of WCS frustration was an apparent slowness in the disbursement of USAID funds to the KFP. The funding mechanism described by the CA consisted of preparing periodic amendments when needed. Although \$1,400,000 was distributed in a first tranche and three amendments, delays between submission of the amendments and receipt of funding caused problems for the project; WCS had to advance its own money at times to keep the project moving. Some of the initial advanced funds were never recovered.
13. Another problem arose over financial management. A WCS-organized audit of Project expenditures carried out by Peat Marwick-Nairobi in November 1993 -- 18 months after Project implementation -- resulted in 23 recommendations and detected serious difficulties with the Project accounting system, a holdover from simpler times under the previous Biodiversity Project grant. While no fraud has been detected, WCS has not yet fully responded to the audit's recommendations, making it ineligible to continue to receive USAID funding for the Project. WCS believes that many of the problems detected by the audit would not have occurred had USAID lived up to its CA obligation to arrange an annual audit. However, the funds for an audit were in WCS's project budget with nothing to prevent WCS from initiating it. Moreover, WCS did not place accounting as a serious concern in project management, even after the project ballooned in scope of activities and amount of funding.

14. These issues were complicated by several communication problems, including:

- Varying authority of WCS field personnel to represent WCS to USAID/Kampala on Project issues. Senior WCS personnel in New York viewed that this role was at different times properly assumed by the Project Manager, the WCS MUBFS Co-director and by senior New York staff. However, USAID/Kampala viewed senior Kibale-based WCS staff as official WCS spokesmen for the Project.
- Lack of effective and transparent dialogue between USAID and WCS/New York to negotiate and resolve differences over interpretation of the substantive involvement clause of the CA.
- WCS/New York felt that USAID often did not respond to many WCS communications in a timely manner or quickly communicate to WCS/New York its knowledge of some serious problems in the management and administration of the Project. This resulted, in part, because of the absence of a functioning Grants Management Unit (see item 17 below). At times, however, WCS/New York had highly unrealistic expectations of USAID personnel. These problems were exacerbated by the long-distance nature of most of USAID - WCS communications and a growing mutual distrust that counterpart personnel were acting in good faith.
- The language and tone of much of the recent correspondence between WCS/New York and USAID tending to obscure meaningful content, thus exacerbating mutual discontent.

15. In general, USAID has maintained a positive working relationship with the Project Manager.

16. USAID involvement in the Management Committee, Research Sub-Committee and in voluminous communication with WCS New York meant that KFP absorbed a much greater proportion of administrative time than any other project administered by USAID/Kampala at the time. This was exacerbated by delays in the development of a functioning Grants Management Unit (see item 17 below).

17. **KFP - USAID - Grants Management Unit.** The KFP was to have been subject to oversight by a Grants Management Unit (GMU), to be created as part of the Action Program for the Environment. There were considerable delays in the creation of the GMU. For all intents and purposes, the Project has been overseen directly by USAID staff with multiple, time consuming responsibilities; the presence and focussed participation of GMU technical support staff should have helped the KFP more quickly identify and resolve some of its problems.

18. **KFP-MUBFS.** The Project Manager and the MU Co-Director are both stationed at MUBFS. The CA is unclear as to who should have ultimate authority over MUBFS funding from the KFP. (See Finding 9). The lack of clear definition of responsibilities between Project Manager and Co-Director of MUBFS, and the physical occupation of MUBFS by the Project Manager has led to much confusion concerning responsibility for the field station and other associated KFP activities: community outreach, tourism development, and UNP support. KFP and MUBFS become one and the same for many people. In the evaluation team's view, this is a weakness in project design.

19. **Makerere University (MU) and MUBFS - Forest Department (FD) and Uganda National Parks (UNP).** The control of the Kibale Forest was in the hands of the Forest Department (FD) until November, 1993. Every indication is that an excellent working relationship existed between MUBFS and the Forest Department. There was a signed MOU between MU and FD regarding the use of the forest for research purposes. The Solicitor General's Office had some difficulties with the document but a resolution was expected and the principals reaffirmed their intent.

20. In November, 1993 the Kibale Forest Reserve was made a National Park with control given to Uganda National Parks (UNP). When the transfer of control occurred, the FD left Kibale and took their resources, including some personnel, with them. The management of forested park land is a new experience for UNP. The working relationship between KFP and UNP appears to be good, but has been complicated by the incipient nature of UNP administration at Kibale; KFP expects to provide significant support to UNP staff and their work in Kibale Park. An informal working relationship exists between MUBFS and UNP which allows research and training courses to continue. However, the draft MOU between UNP and MU is still being negotiated. The type and purpose of research to be undertaken is being discussed; the major issue of concern seems to be the degree to which MUBFS research must directly apply to problems of park management. The results of these discussions will have a direct bearing on the future research and training to be done at MUBFS.

21. A working relationship between MUBFS and UNP with respect to research and training is not yet well-established. Primary constraints thus far appear to include the absence of a WCS MUBFS co-director, an awkward transition between Forest Department and UNP authority over Kibale and consequent lack of opportunities have impeded effective collaboration between FD and UNP personnel, the lack of an MOU between MU and UNP over MUBFS and the very recent appointment of a new Kanyawara-based UNP warden for KNP.

22. **USAID-UNP-KNP.** The original Cooperative Agreement includes a significant amount of support for the Forest Department, both in terms of infrastructure, equipment and vehicles, as well as for per diem, training and tourism development. With the transfer of Kibale to UNP, it can be assumed that this support will also be transferred. Aside from "Project Performance Allowances" for KNP staff, and motorcycles for the Wardens, little has been done in this regard. USAID is also supporting UNP through other funding mechanisms. It is unclear at this time to the evaluators where or from where how future funding for the Kibale National Park will come.

### Conclusions

1. The KFP Cooperative Agreement contains significant design flaws which have caused severe problems for project implementation. Most important are the poorly defined relationships between the four major project sub-components and the very poorly defined roles and responsibilities of the MU and WCS MUBFS Co-directors and the Project Manager. The project implementation was deeply affected by the absence of an effective Grants Management Unit in place from the project's initiation.

2. Disagreement between USAID and WCS concerning interpretation of USAID's appropriate degree of substantial involvement in the KFP, especially with regard to personnel review and selection, was the source of significant project implementation delays.

3. USAID and WCS New York personnel have expended a disproportionate amount of time and energy on the KFP. Better communication and the existence of an effective Grants Management Unit

should have improved this situation, and indeed, avoided the project's dissolution.

4. The increase in scale of activity and funding between the Biodiversity Program grant and the KFP Cooperative Agreement should have raised red flags in both USAID/Kampala and WCS with regard to necessary changes in project administration and management. Instead, there was little or no change until the Project Manager assumed financial responsibility and demanded a USAID financial assessment.

5. Makerere University has not clearly defined the role and supervisory location of MUBFS, provided adequate staff positions and qualified personnel for the operation of MUBFS, nor has it established a line item in the annual University budget for the core costs of MUBFS. Its expressed desire to do so beginning next year should be strongly encouraged. An MOU between Makerere and UNP over MUBFS has not been signed.

6. The incipient nature of UNP Kibale National Park administration, together with left-over institutional frictions related to the transfer of the area from FD to UNP, has hindered delivery of significant KFP support, as well as the necessary coordination of activities with MUBFS and IUCN, and the finalization of a MU-UNP Memorandum of Understanding. UNP-KNP must take a more visible and participatory role in future KNP related in-park and out-park activities.

#### Recommendations

1. Follow on USAID projects at Kibale should clearly define lines of authority and responsibility among project personnel and between USAID, GOU and implementing institutions. USAID should grant cooperating institutions considerably more leeway in selecting qualified personnel than was evidenced under the Kibale Forest Project.

2. All sub-projects of the Action Program for the Environment should be managed by the GMU.

3. Further long-term USAID support for MUBFS should be conditioned upon some direct financial investment of MU in the field station. MU should also develop an Memorandum of Understanding with UNP to clarify the relationship between the KNP and MUBFS. The memorandum should enable the field station to actively meet long-term conservation research and training objectives while also assisting KNP in meeting short-term park management goals.

3.2 *Examine the project and field station management systems, including the management committee, the research committee, the Kibale Forest Project management team, and established group dynamics that exist and their effect on project implementation; assess the project management and administration capacities, and identify techniques for strengthening them if necessary;*

#### Findings

1. The management of MUBFS is defined by the terms of KFP. The MUBFS Management Committee acts as a board of directors for MUBFS, setting policy and exerting overall control of the station. Its role is defined by the terms of the Cooperative Agreement. Twelve of the eighteen members are on the staff of Makerere University. The Committee met at approximately three month intervals and the minutes reflect a general concentration on the growth of MUBFS. Relatively little

recorded dialogue concerns problems of outreach, tourism or forest/park management. No other external management committee was organized to address these project activities.

2. The KFP management team has never been complete. During the past year, a full time accountant has been added, strengthening a previously weak part of the Project team. Management meetings of the senior staff of KFP plus representatives of special groups such as station-based researchers have been held every two to three weeks since early 1993. These meetings, called Table Meetings, have recorded minutes and discuss a range of topics from major project activities such as tourism to matters of general concern such as vehicle policy or the need for a pharmacy. These internal meetings fulfilled necessary functions of problem solving and internal communication.

3. The KFP had an annual budget about ten times larger than the "biodiversity grant" which preceded it. The Cooperative Agreement did not fully consider the level of effort required to administer the new project. An annual financial audit, to be arranged for by USAID, is specified in the CA. Unfortunately, the first audit covered the first two years and found numerous errors. Disbursement of funds by USAID to the project were halted pending resolution of audit recommendations.

4. As noted in Section 3.1 (Findings, item 17) senior WCS field personnel were provided varying authority by WCS/New York to represent WCS to USAID/Kampala on Project issues.

5. The activities of the MUBFS Research SubCommittee are evaluated in sections 4.2 and 4.3

#### Conclusions

1. The structure of KFP and the Management Committee give the impression that MUBFS and the Project are one and the same. No equivalent decision-making body has existed for the other components of the project.

2. The use of internal KFP meetings has helped facilitate communications between Project staff.

3. The lack of an administrative unit with good accounting capabilities contributed markedly to project problems. Delays in conducting the first audit compounded the difficulties.

#### Recommendations

1. Future project designs should adequately recognize relative contributions of project elements and design administrative and control units accordingly.

2 MUBFS management should be supported by USAID funding, but not singularly defined by it. An appropriate institution running MUBFS should have the capacity to actively seek funding to fulfill management objectives in addition to those supported by USAID.



3.3 *Assess the potential for overall long-term sustainability of the activities being initiated and supported by MUBFS, UNP and the project.*

3.3.1 *Institutional and economic sustainability of the MUBFS program.*

#### Findings

1. User fees for researchers, field courses and workshops are beginning to generate substantial revenue to the field station. MUBFS received US \$17,000 from user fees from 1994 field courses, and income is projected to be about \$25,000 in 1995. It is estimated that MUBFS needs to collect US \$15,000/month to cover recurrent costs.
2. Station fees for researcher and field courses are modest relative to those of the few more established tropical field stations and in our judgment quite appropriate given the still limited and developing station capacity to provide necessary services.
3. MUBFS currently has extensive periods each year when it is underutilized. Promotion of the station as an attractive site for additional workshops and training courses and limited tourism, as well as the continued use of the station by "core users" for annual training courses should substantially increase its capacity to generate revenue.
4. Successful biological field stations require very strong leadership and strong institutional support capable of providing management and technical expertise, and international fundraising and public relations. This institutional capacity is presently lacking at MUBFS.
5. The imminent withdrawal of WCS from the USAID cooperative agreement, the uncertainty over the future level of USAID support for MUBFS, the unclear institutional linkages between MUBFS and Makerere University and the lack of an MOU between MU and UNP makes this an extremely precarious point in the development of the station. Institutional sustainability is not presently assured.

#### Conclusions

1. MUBFS is a long way from achieving financial sustainability and, like most biological field stations, will likely need to secure continued donor (as well as MU) funds to cover both infrastructure development and some recurrent costs.
2. Achieving both financial and institutional sustainability for MUBFS will probably require, at minimum (1) continued USAID financial assistance to develop MUBFS infrastructure and research capacity, (2) the development of a regular core of users of the field station for training courses an appropriate fee structure that can provide a predictable source of revenue, (3) clear financial and institutional support for MUBFS within MU, (4) the development of a strong long-term partnership between MU and other universities and institutions committed to supporting MUBFS, (5) aggressive fund-raising by the partnership from other donors, and (6) an MOU between MU and UNP that assures the status of MUBFS as a center for both basic and applied research and training.
3. USAID financial support for MUBFS over the next twelve months is most needed to provide for improving management capacity, essential station infrastructure to accommodate field courses, and basic research equipment (see Sections 4.3 and 4.4).

### Recommendations

1. MUBFS should be managed by Makerere University in close partnership with one or more international institutions (e.g. universities) with the demonstrated capacity to provide leadership and management support for research and training in tropical forest conservation. This consortium should be developed quickly, within the next 9-12 months. In the interim, MUBFS should be placed under the umbrella of an appropriate existing MU unit, such as MUIENR.
2. The MU consortium should hire a single station director. The director should have a strong background in tropical forest science, superb leadership and management skills and substantial international experience.
3. User fees for MUBFS-based researchers, field courses and workshops should be targeted to meet MUBFS recurrent costs. The development of limited and regulated tourism at MUBFS should also be encouraged as a means of generating revenue.
4. USAID/Kampala should provide make a 5-7 year commitment to support MUBFS station operations and infrastructure development beyond the termination of the current CA. However, support beyond the next 12 months should be conditioned upon (1) the development of an appropriate institutional consortium as described in Recommendation # 1 above and (2) an agreement by Makerere University to also provide direct financial support for the research station.

#### *3.3.2 Institutional and Economic Sustainability of UNP Activities*

### Findings

1. KNP is projected to collect US\$3.4 million in user fees during the 1994-95 fiscal year, and 16 million shillings from logging concessions, against projected recurrent expenses of about US\$40 million.
2. Logging revenue of softwood plantation is considered by UNP to be a short-term benefit, perhaps 5 years.
3. The Interim Management Plan for the Forest Park projected tourism income of about US\$8.4 million for the first year.
4. Visitors numbers from 1993 to 1994 to Kanyanchu have leveled off after an initial large increase from 1992 to 1993.
5. Tourism to KNP-Kanyanchu has resulted from word of mouth; there has been no active promotion of this activity.
6. The government of Uganda is urging UNP to decrease its reliance on government budgetary disbursements, i.e. become self-sufficient. As a parastatal, UNP retains the income it generates.
7. Government budgeted salaries for KNP personnel are extremely low. Without added assistance from the Project, this situation will be reflected negatively in the quality of KNP staff.

8. KNP long-term ecological sustainability will depend to a large extent upon the relationships that it develops with adjacent communities, and even less predictably, upon national policies and events which effect land tenure, land use, and human migration.

### Conclusions

1. Without Project support, KNP does not have the technical nor the economic resources to sustain the park at the present time, nor will they have for 3 to 5 years.

2. Tourism represents the best viable long-term source of income for KNP. However, a thorough study is needed to determine to what extent tourism can generate income for the KNP. It will probably never be able to cover all of the KNP's recurrent expenses.

3. The long-term viability of KNP is linked to UNP's capacity to influence national policies and events that will impact protected areas throughout the country, and particularly, western Uganda.

### Recommendations

1. An MOU between Makerere University and UNP must be developed and signed which recognizes the need for MUBFS and KNP to be closely linked for the appropriate management of the forest and to achieve the long-term viability of both institutions. The MOU should be based upon a management plan to be developed for the Park, and the MUBFS development plan.

3.4 *Assess the project's impact vis a vis USAID's Strategic Objective #2, i.e. the conservation of biological diversity.*

### Findings

1. USAID's Strategic Objective 2, "Stabilize Biodiversity in Target Areas", has three indicators which are used to measure success. These are: 1) current levels of tree, mammal and bird species maintained; 2) the current surface (land) area of protected areas maintained; and 3) an increase in the percent of local men and women deriving benefits from activities related to protected area management.

2. The status of the Kibale Forest has changed to that of a park, making the area one of a high level of protection. While trees in some plantation areas are being harvested, the current practice is encourage local species regrowth and the eventual return to native forests. The population of mammals appears to be increasing and bird life is abundant. The research which has been conducted and is being planned at MUBFS will contribute to the development of plans to improve the management and conservation of these resources. (See Section 4.3)

3. The boundaries of the park are being delineated with plantings; an activity currently undertaken as a part of the IUCN project. The size of the protected area has increased with the inclusion of former migration corridor between Kibale and Queen Elizabeth parks.

4. Ample evidence exists illustrating that people in the surrounding communities are benefiting from activities associated with the Project and Kibale Park. The ecotourism development has allowed the growth of local hotels and restaurants and provided employment in occupations such as park tour

guides. Also, sustainable uses of the forest in activities such as bee keeping and wild coffee harvesting are being allowed to continue.

### Conclusions

1. The activities of the Project and of the GOU agencies with which the Project works and supports are in line with and have a positive impact on USAID's Strategic Objective number two.

### Recommendations

1. Every effort possible should be made to continue the core activities of the Kibale Forest Project as an aid in meeting the long term goals biodiversity conservation and the USAID Program.

#### 4. RESEARCH AND TRAINING PROGRAM

- 4.1. *Examine the linkages between MUBFS, Makerere University, WCS, the Ugandan National Parks, and former linkages with the Forest Department in relation to research, inventory and training.*

##### Findings

1. According to the Memorandum of Understanding between MU and WCS, MUBFS is wholly a part of the university. It has formal linkages through the MUBFS management committee with several university departments (Zoology, Botany, Forestry, Geography and Veterinary Medicine) and institutions (MUIENR, MISR) as well as UNP and the Commissioner for Game. MU provides salaries for two lecturers in the Departments of Zoology and Botany who are in residence at the station throughout much of the year as MUBFS Co-director and Senior Researcher, respectively.

2. There appears to be no direct financial investment on the part of MU into the running of the field station. In addition, the inputs of several MU departments and institutions on the management committee with respect to research and training and management oversight of the field station appear to be very limited. This limited investment reflects, in part, the currently amorphous formal linkage between MUBFS and MU administrative structure.

3. There is some discussion of having MUBFS become formally linked to MU as a semi-autonomous institute.

4. WCS has played a key leadership role in the development and continued operation of MUBFS. WCS financial and technical input includes direct funding for Ugandan researchers, long-term technical support and some infrastructure development. WCS has also been responsible for soliciting and acquiring international donor support from the EC and USAID.

5. Under the Kibale Forest Project, the responsibilities of the WCS station co-director, KFP project manager and WCS personnel in NY have not been clearly defined. There has as a consequence been considerable confusion on the part of some USAID and GOU personnel over who speaks on behalf of WCS with respect to the operation of MUBFS.

6. Linkages between MUBFS and the Forest Department with respect to research and training were reportedly positive. Cooperation was enhanced by a positive working relationship between the WCS MUBFS co-director and the FD manager residing in Kanyawara. Training included a three week Biodiversity Training Seminar for ca. 30 Forest Rangers held at MUBFS in May 1992. The course was apparently organized and funded externally through GEF/World Bank funding.

7. The absence of a WCS co-director for MUBFS since the departure of Andy Johns has had a marked negative impact on MUBFS research and training and the development of effective institutional collaborations.

8. A working relationship between MUBFS and UNP with respect to research and training is not yet well-established. Primary constraints thus far appear to include the absence of a MUBFS co-director, an awkward transition between Forest Department and UNP authority over Kibale and consequent lack of opportunities for effective collaboration between FD and UNP personnel, the lack of an MOU

between MU and UNP over MUBFS and the very recent appointment of a new Kanyawara-based UNP warden for KNP.

9. UNP is interested in MUBFS providing information that can aid UNP in the management and conservation of the KNP. However, few steps have yet been taken to collaboratively define realistic applied research and training priorities and timetables.

### Conclusions

1. MUBFS linkage to the MU administrative structure is not currently well-defined. This may be limiting effective investment of MU departments and institutes with appropriate expertise in MUBFS research and training.

2. Working relationships between MUBFS and UNP with respect to research and training are nascent.

3. WCS has played a key leadership role in MUBFS. WCS linkages with MU, USAID and other GOU institutions have to varying degrees been constrained by the slow hiring of WCS KFP Project Manager and MUBFS co-director, the amorphous linkage between MUBFS and MU and lack of clarity about the roles and responsibilities of MUBFS co-directors, KFP Project Manager, WCS NY personnel in decision-making about research and training at MUBFS.

### Recommendations

1. MUBFS research and training may be enhanced by bringing the station into closer alliance with other established MU institutions, particularly MUIENR (see also Section 3.3.1)

2. The future development of a partnership between MU and other universities or NGO's in the management and oversight of MUBFS should be marked by more clearly defined institutional roles and responsibilities. (see Section 3.3.1).

3. The appropriate role of UNP with respect to research and training at MUBFS needs to be clarified through an MOU between UNP and MU. The MOU should incorporate recommendations with respect to research and training priorities for MUBFS discussed elsewhere in this document.

4. USAID should resist funding substantial new or expanded efforts in applied research at MUBFS until (1) an appropriate institutional partnership/consortium for managing MUBFS is created, and (2) UNP and MUBFS applied research goals are developed and incorporated into an MOU and a KNP park management plan.

4.2. *Assess whether research priorities at MUBFS are clearly identified and in place, and whether they are well-known or readily available to outside researchers.*

### Findings

1. Research priorities for MUBFS have been drafted and revised by various Ugandan and expatriate researchers at the field station during the past two years. The goal of these priorities as described in the 1995 MUBFS workplan is to provide "a scientific data base on natural and human use systems in the Kibale National Park and its environs to informed and scientific management of the resource

base...". Broadly, priority research objectives are to:

- describe the distribution and abundance of extant plant and animal species in KNP,
- develop and maintain a long-term program to monitor natural and anthropogenic changes in KNP's plant and animal populations,
- develop an understanding of key factors shaping the dynamics of KNP's ecosystems through, for example, studies of forest regeneration in grasslands and plantations, and
- provide scientific input into plans to develop and monitor programs of "sustainable use" of KNP's forest resources by local communities.

These research objectives dovetail with UNP's stated objective of having MUBFS focus on research that can be directly applied to improve the management of the park.

2. The current utility of MUBFS research priorities and the means by which they might be implemented in the future are unclear. Priorities have been used to some degree by the MUBFS Research Subcommittee to select among proposals submitted for funding by the Kibale Forest Project. Some proposals for studies of primate behavior, for example, have been rejected on the grounds that they did not fall within priority areas. However, others (e.g. studies of crater lake biota) have been approved. According to current guidelines of the Research Subcommittee, applicants to conduct externally funded research at MUBFS must also describe how their studies contribute to meeting these objectives. It is not clear whether they are also intended to guide or determine the content of national or international field courses (also, externally funded) held at MUBFS.

3. The dissemination of information about MUBFS research opportunities, research priorities, and opportunities for funding appears to be carried out on a largely ad-hoc, word-of-mouth basis. Detailed guidelines for solicitation of MUBFS research opportunities have been recently drafted by Robert and Cheryl Fimbel, but the 1995 MUBFS workplan contains no discussion of whether or how they are to be implemented.

### Conclusions

1. The purpose of MUBFS research priorities is not well-defined.

2. If priorities are to serve as a decision-making tool for what research should be carried out at MUBFS, then they are too narrow in scope, for two primary reasons. First, they focus singularly on priorities perceived to be important for managing Kibale National Park. Yet MUBFS lies in close proximity to a diverse array of other habitats of high biodiversity value in southwestern Uganda, including numerous crater lakes and the montane forests within the Ruwenzori Mountains National Park. The conservation value of these other sites as habitat for endemic or rare species and the impacts of human activity on them is only beginning to be documented. As the only biological field station in the region, there is no clear reason why MUBFS should not also be available for researchers interested in conducting studies in these habitats. The conservation and training benefits of L. Chapman's studies of crater lake biota demonstrate the value of MUBFS-based research extending to other habitats near Kibale.

Second, MUBFS research priorities fail to recognize the considerable conservation benefits of other research topics in Kibale. A major attraction of Kibale for ecotourists, for example, are its populations of chimps and other primates -- these species are attractive to tourists in large part because they

continue to be the focus of well-publicized basic research. The public relations and hence, tourism value of such "basic" research in Kibale may ultimately do more to effectively conserve KNP than many of the applied studies described as MUBFS research priorities.

### Recommendations

1. MUBFS research priorities should determine the objectives of MUBFS research staff, but not of individuals with external sources of funding. Realistic priorities and timetables for applied research and monitoring should be developed collaboratively between MUBFS senior technical staff, with assistance from qualified external advisors, and UNP/KNP. They should be incorporated into both an MOU between these institutions and a park management plan.
  2. Research priorities should be periodically reviewed and modified as needed as future research needs are collaboratively identified. MUBFS in collaboration with UNP should select from current research priorities a subset of topics on which answers are most critically needed to provide short and long-term benefits in managing Kibale National Park.
  3. MUBFS should strongly encourage a broad range of externally funded research, facilitate it and earn revenue from it. MUBFS should also strongly encourage externally funded expatriate researchers to collaborate wherever possible with Ugandan students and scientists and to hire local field assistants. Toward this end, information about MUBFS research opportunities should be better advertised to the international research community, through, for example, publishing notices in the newsletters of appropriate research societies.
  4. The Research Subcommittee should actively solicit and support research proposals, particularly from Ugandan students and scientists, independently of whether the proposed studies lie within the circumscribed boundaries of the MUBFS research priorities. MUBFS, UNP and donor agencies should recognize the training and ultimate conservation value of student research, independently of whether that research fulfills short-term park management objective (see Section 4.3, Recommendation #2).
- 4.3. *Assess the quality, relevance and accessibility of MUBFS research that has been completed to date, opportunities for future research, and problems that may be developing.*

### Findings

1. The Kanyawara field site in the Kibale Forest has been an important center for tropical forest research since Struhsaker began studies of red colobus monkeys there in 1970. Between 1970-1987 (when MUBFS was formally created at Kanyawara) some 34 major projects were initiated. Many focussed on primate behavior and ecology -- Kibale is one of premier sites in the world for observing primates -- but several important basic studies of other taxa (e.g. duikers, rodents, insects) and management-oriented research (e.g. effects of logging on forest fauna) were conducted as well. Between 1987-1994, an additional 29 major projects have been initiated, with an increasing proportion focussing on topics of applied conservation biology (e.g. assessments of crop-raiding patterns and impacts, conservation status of forest elephants, role of herbivores and seed dispersers in forest regeneration, social and economic values of non-timber forest products, impacts of swamp degradation on aquatic biodiversity). Kibale research has been the basis for 3 Ugandan and 9 expatriate Ph.D dissertations and 7 Ugandan MSc theses; as of August, 1994, an additional 6 Ugandan and 9 expatriate students were completing graduate degrees based on Kibale research. Research at Kibale has produced



over 163 publications in scientific journals, a number resulting from collaborations between Ugandan and expatriate scientists. No other tropical forest research site in Africa has produced an equivalent body of internationally recognized forest research or provided training for as many students.

2. The results of many Kibale-based studies that have been accessible to the international scientific community through publications have not been readily available to Ugandan students and national decision-makers interested in forest conservation policy. MUBFS is scheduled to have a complete set of publications encompassing research to date in its library by 1995 due to efforts by Colin and Lauren Chapman (University of Florida) to provide copies of missing articles. Field stations have traditionally found it difficult to obtain research results from visiting scientists, since studies are typically published some time after the field work is completed. To minimize this problem in the future, MUBFS personnel are considering having international scientists working at MUBFS provide a deposit of US \$50.00 to be repaid when they subsequently send in copies of theses or published articles. This is unlikely to be effective.

3. The Kibale Forest Project is by far the most important source of funds for Kibale-based research by Ugandan and other African scientists and students. However, relatively few research proposals from Ugandans have been approved by the MUBFS Research Subcommittee that oversees the disbursement of KFP research funds. In part, this may be due to the very slow allocation of USAID funding to the KFP -- apparently, far less was available for distribution than the authorized \$200,000 annual research budget. However, a very large proportion of proposals received from Ugandan students and scientists have been rejected by the Subcommittee on the grounds that they are not sufficiently well-designed. Often, recommendations for improvement were made and applicants were advised to resubmit proposals.

4. Over the course of the Kibale Forest Project, the infrastructure necessary to carry out quality basic and applied research at MUBFS has expanded considerably. However, there remain significant areas that continue to need improvement if MUBFS-based researchers are to provide key information essential for understanding and managing Kibale National Park and other important ecosystems in Uganda. In addition to improvements needed in general station infrastructure and administration (see Section 4.4), critical equipment and infrastructure needs for MUBFS-based research include (1) weather stations at several points in KNP to monitor seasonal and annual changes in rainfall, temperature, and relative humidity (2) decent quality maps of the research trail system and topographic maps of KNP, (3) radios, and (4) a variety of basic field research equipment.

5. According to the CA, senior MU researchers with expertise in sociology and agroforestry were supposed to be working on a full time basis at MUBFS beginning in Year 1 of the Kibale Forest Project. These positions have not been filled, greatly limiting MUBFS capacity to carry out applied research or provide training in these areas.

6. MUBFS senior research staff carry out some valuable studies, particularly in forest dynamics (e.g. gap dynamics and regeneration following disturbance, tree growth and mortality rates) and the ecology of wild coffee. Recent research productivity has been very limited, however, perhaps due to a combination of teaching loads at MU and increased administrative burdens associated with running the station. MUBFS senior researchers express a strong desire to be able to focus on research and training.

7. Expatriate researchers engaged in long-term studies at MUBFS have conducted basic and applied studies of considerable value and play a very important role in raising the international visibility of Kibale and MUBFS.

8. The prolonged absence of a WCS Co-Director following the departure of Andy Johns and the unfilled position of MUBFS Station Administrator has also limited MUBFS research and training capacity. A strong station director with a competent administrative staff should be able to carry out and supervise research on a 20-25% basis.

9. Current studies of Kibale forest dynamics are only coordinated to a limited degree with similar studies of other tropical forests.

### Conclusions

1. MUBFS-based research has contributed a body of basic and applied research in tropical forest ecosystems that is unparalleled in Africa. MUBFS research and training capacity has been substantially aided by the Kibale Forest Project.

2. Despite this strong record, effective research at MUBFS under the Kibale Forest Project has been substantially constrained to varying degrees by limited research equipment and supplies, unfilled co-director and research staff positions, and administration and teaching loads of MUBFS senior researchers.

3. The current process of research proposal review by the MUBFS Research Subcommittee may serve to effectively constrain rather than facilitate Kibale-based research by Ugandan students and scientists. There is no doubt that research proposals submitted by Ugandan students are often of poorer quality than those submitted by international scientists with typically far more experience in field research, proposal writing and experimental design. But mentoring by experienced researchers and hands-on research experience are essential for improvement. Opportunities for such experience may be limited by an overly critical review of Ugandan research applications.

4. The contribution of MUBFS-based research to understanding of forest ecosystem dynamics and management should be enhanced by improved coordination of research and monitoring methods with studies carried out at other tropical forest sites.

5. Most but not all published accounts of Kibale-based research are provided to MUBFS. A deposit system is unlikely to lead to marked improvements.

### Recommendations

1. USAID/Kampala should strongly support the continued development of MUBFS capacity to support research in tropical forest science through (1) improved basic infrastructure (e.g. electricity supply and wiring, water supply) and (2) financing the purchase of critical research equipment and supplies.

2. USAID/Kampala should strongly support opportunities for Ugandan and other African students and scientists to conduct basic and applied research in tropical forest science at MUBFS. Toward this end, the MUBFS Research Subcommittee should more actively solicit and support applications for small proposals to conduct preliminary research from qualified African applicants, even if the proposals are not highly polished. A total research grant budget of ca. US \$50,000 (the level requested in the 1995 MUBFS Workplan) is probably sufficient. The Research Subcommittee should more effectively facilitate collaborative/mentoring relationships between student applicants and MUBFS research staff and other Ugandan and expatriate scientists. Proposals might be especially solicited from students that

have completed MU or Tropical Biology Association field courses at MUBFS.

3. A full-time MUBFS research staff with social science expertise is necessary to conduct and oversee socioeconomic assessments of local community use of and impacts on forest resources. All MUBFS research staff should maintain and be held accountable for demonstrable productivity in research and training.

4. MUBFS and its future partner institutions in a consortium overseeing the administration of MUBFS should consider forming a scientific advisory panel comprised of qualified Ugandan and expatriate scientists. This panel would provide independent input on the future hiring of MUBFS research staff, research priorities for the field station, and peer review of research proposals.

5. MUBFS should better coordinate long-term monitoring of forest dynamics at Kibale with equivalent monitoring ongoing at other tropical forest research sites. Monitoring studies using standardized methodologies, for example, are currently being established at several forest sites through the Smithsonian Center for Tropical Forest Science.

4.4. *Examine the current state of MUBFS field courses, how they have developed and how they may develop in the future.*

#### Findings

1. Several international field courses in tropical forest ecology and conservation biology were run at MUBFS in 1994. These included two one-month courses run by the European Tropical Biology Association, a six-week course run by the University of Florida and a two-week course from the University of California, Irvine. These courses have substantial value, for several reasons. First, they provide participants with a unique opportunity to gain expertise in the basic and applied ecology of an African tropical forest -- no equivalent training center exists elsewhere in Africa. The results of some 25 years from the only equivalent field courses run in Latin America by the Organization for Tropical Studies demonstrate that many students receiving this hands-on experience at early stages of their careers go on to become leaders in tropical forest management and conservation. Particularly valuable in this regard is the stated objective by the Tropical Biology Association (TBA) to have at least 50% of course participants be from East Africa and to provide financial assistance for their participation. Several East African students (though less than 50%) participated in the 1994 TBA courses.

A second benefit of these courses is that student research projects carried out during field courses can provide valuable information for the conservation and management of Kibale National Park. TBA course projects in 1994, for example, included several studies directly within the scope of current MUBFS applied research priorities, e.g. baseline species inventories, forest regeneration studies, investigations of the ecology and local use of forest products. Future course participants and researchers will be able build upon these initial studies in a manner that can inform forest management policies. The Organization for Tropical Studies (OTS) experience in Latin America indicates that students commonly return to the course field site to conduct thesis and post-thesis research on key issues in forest ecology and management. This is facilitated by small grants provided by OTS on a competitive basis to students that have completed training courses.

A third benefit is that station user fees paid by international field courses can provide substantial income to MUBFS and help the station meet its recurrent costs (see Section 3.3.1)

2. MUBFS is designed to accommodate field courses for up to 28 participants; this number was exceeded by the more than 30 participants in the TBA courses. This, plus the apparently limited experience of MUBFS staff in hosting courses and the not-yet-completed station infrastructure apparently led to several logistical difficulties for the TBA course. We also found that MUBFS personnel were not sufficiently trained or supervised to handle large numbers of visitors. These difficulties are not surprising for a nascent field station, however. Indeed, enthusiasm for continued and regular use of MUBFS in future years is quite strong for both the TBA (8/17/94 letter of TBA Director Leon Bennun to WCS) and the University of Florida (C. Chapman, pers. comm.).

3. Several one-week field courses for undergraduate and Msc. students from the MU Departments of Zoology, Botany and Forestry have also run at MUBFS. No documentation on these courses was available for this evaluation. Inadequate advanced planning of the timing of some of these courses and last-minute requests for KFP funding to cover course expenses apparently led to significant problems with MU field courses.

4. Some conflicts over the use of the Kanyawara trail system by MUBFS researchers and field course participants were reported. Such conflicts may grow as the station becomes increasingly used for field courses and workshops unless clear policies and practices to avoid them are adopted.

### Conclusions

1. MUBFS is developing into an extremely important center for training Ugandan, other African and international scientists in tropical forest ecology, conservation and management. This will likely continue if station infrastructure is improved, the station is well-managed by an experienced director, station policies to avoid potential conflicts over use of trails and station facilities are adopted, and MUBFS administrative personnel gain sufficient expertise in running courses.

### Recommendations

1. MUBFS needs to develop sufficient infrastructure and administrative capacity to handle several 4-6 week field courses of up to 30 participants each year. The most immediate infrastructure needs at Kanyawara include: (1) better electricity supply and wiring to accommodate computer use, (2) improvements to dormitories (better furniture, mosquito proofing), (3) the development of an adequate running water supply and (4) improvement of latrines. Infrastructure improvements at the Ngogo site may also be necessary to accommodate field courses. Strong leadership by the MUBFS station director, the hiring of a senior administrator and increased training, supervision and experience of station administrative staff are essential.

2. MUBFS senior staff should develop a set of policies to insure that potential conflicts over use of the station and trails by field courses and other researchers working at Kibale are minimized.

3. Small grants should be made available through the Kibale Forest Project on a competitive basis to African participants in MUBFS-based field courses for post-course (thesis) research projects.

4. Further guidance in implementing these recommendations should be obtained through consultations with the Organization for Tropical Studies personnel experienced in running field courses through their La Selva Biological Station (Costa Rica).

4.5. *Assess the economic and institutional sustainability of the MUBFS program.*

See Section 3.3.1

## 5. EXTENSION AND OUTREACH PROGRAM

- 5.1 *Examine the overall extension and outreach program, including the "open house" program as well as the out-park activities.*

### Findings

#### A. General Findings

1. A great deal of conservation education and associated tree planting work was carried out under the Biodiversity Grant Project through schools and communities in the Kanyawara area before the inception of the present Cooperative Agreement.
2. Extension and outreach activities, particularly conservation education, were designed to increase environmental awareness among the local communities living in the project area, especially among those who are dependent on forest-related natural resources for their existence.
3. The Project has not developed a forestry extension plan and activities have been implemented in an ad hoc manner without long-term planning.
4. The effectiveness of extension and outreach activities has been limited by: the quick turnover in outreach/extension staff; the inadequacy of trained personnel to carry out extension work; and weak project coordination.

#### B. Open House

1. The Open House, one of the buildings of MUBFS, is the regular venue for meetings and gatherings of students and women. It has served as an important platform for adult education (women's group) and child education (primary and secondary school levels).
2. The activities of the Open House have positively impacted students and teachers in seven schools within a six kilometer radius of MUBFS.
3. Field trips, classroom exercises, and lectures have generated a high degree of environmental awareness among students aged six to fourteen.
4. With the Project's assistance, the women of Kanyawara have been organized into a group, which consists of about forty members. This group, which meets at the Open House once every week, has embarked on small-scale income-generation activities such as raising tree seedlings and producing handicrafts using locally available materials.
5. While small quantities of tree seedlings (both native and exotic) are sold in the local market, handicrafts are sold mainly at a shop adjacent to the Open House. These activities provide a modest income to the local women.
6. The tree nursery and the agroforestry demonstration plot, which were intended to be an integral part of the Open House, have not been maintained since the departure of the Project's Outreach Program Coordinator.

7. The Open House has been functioning independently with the help of a retired headmistress and two teachers, and receives modest financial and technical support from the Project.
8. The headmistress and teachers of the Open House expressed an interest in expanding the building facilities to accommodate more students and conservation education activities.
9. The Open House was originally envisioned as a channel for linking MUBFS's applied research with outreach and extension, however accomplishments in this area are little and seem to have been constrained by personality conflicts between MUBFS and outreach personnel.

### C. Out-Park Activities

1. The Lake Nkuruba Program, supported by the Project, was jointly conceptualized and implemented by researchers from MUBFS and the Project's outreach staff, with inputs from the Nkuruba residents and local institutions such as the Fisheries Office and the Fort Portal Diocese.
2. This program was designed with a view to promote sustainable resource management practices in local communities and to serve as a model for protecting crater lakes. In support of this end, the program liaises with other community groups working on crater lake conservation, including the Kabata Tourism and Conservation Development Project and Rweteera Tourism Society. The program ultimately aims to become an independent NGO capable of self-financing its activities.
3. In collaboration with the Fort Portal Diocese, the program has organized a community group near the crater lake Nkuruba. This group is composed of representatives from local government agencies, the Fort Portal Diocese and the program (staff), and serves as a platform for discussing management decisions. The program, with a core staff under contract with the Project, is actively involved in various income-generation activities including roof-tile production, bee-keeping, fish farming, community woodlot, ecotourism, and tree nursery. Most of these activities provide employment and revenue to the local people.
4. The Project has provided financial and technical assistance for the construction of an education center (modelled after the Open House) that is nearing completion, where conservation education activities will be held in the future. The Fort Portal Diocese has indicated a commitment to make financial contributions for expanding this facility, and to eventually make the center and its activities self-supporting.
5. The number of visitors (foreign and local) to Lake Nkuruba has increased from 68 in 1992 to 183 in 1994. Tourism sites, such as tent shelters, brick fireplaces, showers, pit latrines and a small banda, are currently under construction to enhance the ecotourism potential. With revenue from tourism, it is anticipated that the program will sustain its future activities.
6. The Kabata Farmer's Group, with a membership of 45, has initiated tree planting activities to arrest soil erosion around the crater lake Lyantonde. The group has purchased a sizeable portion of the land surrounding the lake with the intention of controlling human settlement and generating revenue through tourism. With the Project's help, this group recently received a grant from the Netherlands Embassy to develop their activity more fully, particularly through building tourism infrastructure.

7. This group intends to slowly purchase most of the land around lake to stop encroachment and to restore the original beauty of the lake through conservation work.
8. The women of the Kabata Farmer's Group plan to engage in the production of tree seedlings and handicrafts.
9. In both of these crater lake projects, a Peace Corps Volunteer has played a key role in assisting the communities to organize themselves. The Volunteer has used participatory rural appraisal techniques in a less formal way to establish local needs and priorities.
10. The Volunteer is training local men and women in data collection and in maintaining financial and other records.

### Conclusions

1. The extension and outreach activities, particularly conservation education and associated tree planting, could become a basis for positive actions by local communities toward the conservation of protected areas, assuming that proper management systems and trained staff will be put in place.
2. The Open House may be limited in its potential to attract students from other areas mainly because of issues relating to distance and transportation, therefore lacking adequate justification for further expansion. However, MUBFS needs to continue involvement with extension or outreach activities on a pilot scale for desirable farmer interaction related to buffer zone research projects.
3. Nkuruba and Lyantonde crater lake projects serve as a model of ecotourism that can be adopted by local communities living around other crater lakes (over fifty) in the region.

### Recommendations

1. USAID/Kampala should explore ways to continue MUBFS extension and outreach on a pilot basis to support buffer zone research design, provided that trained staff are available.
  2. USAID/Kampala should continue to support, at least on a pilot scale, community based conservation activities such as those carried out at crater lakes Nkuruba and Lyantonde.
- 5.2 *Examine the agroforestry and individual farmer/household outreach activities for relevance, practicability, and results. Identify promising directions for further action.*

### Findings

1. Most of the agroforestry work has centered around Kanyawara and Bigodi, with little or no activity in the northern and eastern sectors of the park boundary.
2. The agroforestry plots maintained by farmers in the Kanyawara area appear to have been established prior to the commencement of the Project.
3. Agroforestry extension activities have faced severe set-backs with regard to personnel. The staff person responsible for agroforestry left the Project abruptly to pursue higher education in the



Netherlands, and later the agroforestry extension staff also departed the project.

4. Progress in agroforestry activities has suffered mainly from a lack of technical leadership and direction, the absence of a clear mandate, and poor communication between the extension personnel and the project management; activities have been implemented on an ad hoc basis, with virtually no planning.

5. The failure to maintain records of progress and activities appear to have been caused by the quick turnover in extension personnel and the informal nature of project management.

### Conclusions

1. The Project has had little success in promoting agroforestry practices among the farming communities living in the buffer zone.

### Recommendations

1. Because of the poor farmer acceptability of agroforestry in the project area, any continued support for agroforestry work must be considered as a low priority.

5.3 *The CA calls for the outreach program to eventually be turned over to GOU agencies and the IUCN's Kibale and Semliki Conservation and Development Project. Assess whether this "handing over" should proceed as proposed in the CA, and examine the sustainability issues related to the various options; including:*

*A) Assess the general IUCN project's outreach activities and methodologies, compared to the activities and methodologies used under the Kibale Forest Project.*

### Findings

1. The Kibale and Semliki Conservation and Development Project (KSCDP) is implemented by the Department of Environmental Protection (under the Ministry of Natural Resources), with technical support from IUCN and funds from the Government of Netherlands.

2. KSCDP currently operates in almost all (seventeen) of the parishes surrounding the Kibale National Park.

3. KSCDP and the Project did not appear to have had a good working relationship during the design phase of the Cooperative Agreement. This had an effect on the subsequent relations between KSCDP and MUBFS.

4. The official "handing over" of outreach and extension responsibilities from the Project to KSCDP did not take place as planned due to the following reasons: 1) the limited size and scope of the outreach and extension activity; and 2) there was nothing to hand over other than the physical target area (Parishes of Kaswa and Kiko). However, a good working relationship has been established between the current project management and KSCDP, with clearly defined responsibilities.

5. KSCDP's outreach/extension activities follow a systematic approach. KSCDP administers participatory rural appraisals, household surveys and resource use surveys before initiating project

activities, whereas the Project has followed an informal public relations approach to initiate conservation at the grassroots level.

6. KSCDP develops detailed half-yearly and annual workplans, maintains records of its activities and progress, while sound planning and documentation have neither been the strengths nor the goals of the outreach program.

7. KSCDP has ten trained extension workers and five coordinators to carry out its activities, while the Project has been constrained by the lack of trained staff.

8. KSCDP monitors its activities through participatory mechanisms, whereas the Project's system for monitoring impact has been less effective.

9. The Project has had some success in impacting a small group of students and local women through conservation education work, but such work has also been limited to the Kanyawara area. On the other hand, KSCDP's Conservation Education Program targets school teachers (instead of students) in about 45 schools, and the participation of teachers in this program is voluntary because conservation education is not part of Uganda's curricula for primary and secondary schools. To sustain this program, however, KSCDP has linked this program directly with the Wildlife Clubs of Uganda, which is a part of UNP.

10. KSCDP's agroforestry activity seems to be limited to promoting fruit tree species among farmers. Nevertheless, it is employing innovative techniques including the promotion of contour planting and grafted fruit trees.

11. KSCDP has made strides to work closely with the UNP. The absence of a written UNP policy to support outreach and extension may limit the cooperation between these two organizations. However, the local Extension Warden for the Kibale National Park has requested higher authorities for four rangers to work exclusively in extension, and seeks training for them from KSCDP.

12. KSCDP seems to have the financial resources to help develop a park management plan for the Kibale National Park.

13. KSCDP's strategy for conservation emphasizes income-generation to enable the targeted communities to become self-reliant when the activity ends in 1995. On the other hand, the Project's philosophy of sustainability believes in educating the local people, as well as in income generation, so that they can eventually assume responsibility for conservation.

### Conclusions

1. KSCDP is able to work effectively with both government institutions and local communities, whereas the primary strength of the Project lies mainly in working on a interpersonal basis with local communities.

2. The absence of a clear policy underscoring the importance of outreach and extension in buffer zones may pose future problems for UNP in terms of being able to undertake outreach/extension activities when KSCDP comes to a closure.

## Recommendations

1. USAID/Kampala should support KSCDP's efforts to develop a park management plan that will involve the local communities in the planning process.
2. USAID/Kampala should encourage the training of park rangers to carry out clearly defined outreach/extension activities. Such training could ideally take place at MUBFS.
3. Support should be continued for those KSCDP activities that seek to reduce human pressure on the Kibale National Park through the involvement of local communities in sustainable resource management.

*B) Examine the MUBFS past and present contribution to the outreach program, and its possible role in future outreach activities, whether housed with the IUCN or the Kibale Forest Project; and*

*C) Assess linkages and levels of cooperation/information dissemination between the Field Station research and the outreach/extension activities.*

## Findings

1. Much of the research activity conducted by MUBFS has dealt with issues inside the park.
2. A Senior Research Fellow at MUBFS has studied the "Ecology and economic potential of wild coffee" for more than five years. The study, conducted in the eastern zone of the Kibale National Park, reveals trends in coffee phenological activity, regeneration, and yield. However, MUBFS has not worked with the extension personnel to explore whether coffee harvesting inside the park by the local communities living in the buffer zone is an economically feasible activity and sustainable in the long run.
3. The study "Some practical aspects of buffer zone establishment and management in the Kanyawara area" has sought to evaluate the performance of alternative crops (tobacco, soy bean and sunflower) under various intercropping regimes. With assistance from the PVO-NGO/Natural Resource Management Project, a trial plot has been established to assess crop yields. Soy bean yields from the trial plot indicate that a substantial income can be derived even from a small acreage. Because of the lack of extension personnel and, due to the conflicts between MUBFS and outreach program staff, only a handful of farmers have tried these alternative crops.
4. A Fulbright Scholar has studied the effects of crop raiding in six villages which are located within 100 meters of the park boundary. The results of this study have been disseminated at a well-attended workshop held in July 1994.
5. A M.Sc. student from the Makerere University has recently completed a study on non-wood products in the Kibale National Park. A report summarizing the research results is pending completion.
6. Since KSCDP assumed responsibility for the outreach/extension component, MUBFS has not taken concrete measures to collaborate with KSCDP to apply its research findings.
7. The results of applied research carried out by MUBFS have neither been adequately prepared nor

published.

### Conclusions

1. MUBFS's contribution to the outreach and extension activities of the Project, in the form of applied research on out-park issues, has been very little due to the lack of leadership and qualified personnel.
2. Given the fact that crop raiding is a serious problem in the buffer zone, applied research on alternative crops can contribute a great deal to the farming communities living adjacent to the park.

### Recommendations

1. USAID/Kampala should, through the Research Sub-Committee, encourage and support collaborative applied research on key out-park issues (e.g., animal crop raiding, alternative cash crops), provided that trained and qualified staff are available to carry out such research.
2. USAID/Kampala, through the Research Sub-Committee, should support: a) agricultural research and development focusing on the suitability of alternative crops with respect to land types, soils and climate; b) feasibility studies on such topics as the acceptability of crop alternatives among farmers, market potential, and transportation of commodities; and c) social research to investigate, for example, the long-term viability of forest products harvesting (e.g., wood, meat, honey, mushrooms, etc.) by local communities, and community preferences with regard to growing cash crops versus food crops.

## 6. TOURISM AND PARK MANAGEMENT

- 6.1. *Examine the out-park village level tourism program, its present and possible future impact on the local economy and social structure (sustainability), and assess future opportunities, given the local constraints.*

### Findings

1. The village level tourism program has advanced to a greater degree than envisioned by the Cooperative Agreement, primarily because of the involvement of a Peace Corps Volunteer with the community of Bigodi, and the growing importance of the nearby Kanyanchu visitor center within the KNP (3,060 visitors in 1993).
2. The village of Bigodi has been substantially impacted by tourism activity because of its proximity to Kanyanchu, the Park's only developed tourism site. The village contains several small hotels and restaurants. A new organization, KAFRED, (Kibale Association for Rural Environmental Development) has developed its own out-park tourism site (Magombe Swamp), and a women's cooperative which sells food and souvenir items at the Kanyanchu visitor center. Benefits derived from both organizations are invested in projects of benefit to all the community.
3. Other villages in the area, namely Rweteera (Rweteera Tourism Society) and Lake Nkuruba have received technical assistance from the Project and are at present in the initial stage of development. Lake Nkuruba is developing small-scale ecotourism sites, including pit latrines, tent shelters, showers and a banda. Lake Nkuruba probably offers more of a tourism resource than Rweteera, although both offer crater lakes as their primary attraction.
4. While no data exists on the impact of tourism on the local communities, a baseline study of the economy of Bigodi, Busiribi and Rugonju villages was carried out in 1990 by Tricontinental Development Consultants of Kampala, when it became clear that development of Kanyanchu would take place. This company is presently proposing to carry out a follow-up study.
5. Uganda National Parks, and specifically, Kibale National Park is very much interested in benefitting local communities based upon the resources offered by the national parks. At the same time, the parks are under pressure to produce income, as the government would like to eventually decrease its budgetary support for UNP. It appears that there is pressure by commercial tourism interests to obtain tourism concessions within the KNP, or to establish commercial tourism infrastructure outside the Park.
6. A thirty-three hectare tract of land between the KNP boundary and Bigodi has been purchased by MUBFS and Project officials (with WCS funding). Its objective is to rationalize the development of tourism infrastructure in this key zone.

### Conclusions

1. Community-based tourism activity has been a very successful part of the KFP, primarily because of capable Peace Corps involvement, with project support and the amount of tourism attracted by Kanyanchu.

2. Because of the special circumstances which have determined Bigodi's successful tourism experience, its replication is not likely to be as successful in most other sites, at least in the short to medium term, and care should be taken not to raise expectations to unreasonable levels.

3. Village level tourism impact appears to have been positive until the present time; nevertheless, negative impacts, especially in the socio-cultural aspects are inevitable, as tourism increases and long-held traditions and customs are altered or forgotten by contact with different ways of life and rising income levels. The Project does not appear to have done anything yet to deal with this sort of impact.

### Recommendations

1. Village level tourism activity, together with KNP and commercial tourism employment, should be considered as a substitute for revenue sharing and should be promoted as such in those areas where appropriate, that is in those communities where tourism income generation will be a significant factor in the local economy. It will obviously not be the solution for most villages in the buffer zone of the park.

2. Sustainability of village level tourism activities will depend upon continued KFP involvement, especially in tour guide training, basic training in hotel management and food preparation, and monitoring and evaluation of tourism impact. Special attention should be given to preparing communities for the changes that tourism will bring to them, and guiding them in deciding how they would like tourism development to occur in their particular situation.

3. Development of Land Trust land should involve a combination of community-based and commercial infrastructure, with benefits accruing to both the communities and KNP.

6.2. *Assess the in-park tourism development activities, and assess the possible future directions under UNP's mandate.*

### Findings

1. KNP at present has one tourism site, Kanyanchu, which was developed by MUBFS, Frontier and the Forest Department beginning in 1991 as a site to divert tourism away from the field station.

2. Kanyanchu was developed primarily for the purpose of observing primates, especially the chimpanzee, for which a process of habituation has been undertaken. Only approximately 20% of visitors are able to observe chimpanzees. Radios, which should have been provided by the KFP, would facilitate chimp and other primate observation.

3. Kanyanchu offers an excellent opportunity to observe other flora and fauna of the Kibale Forest. However, the trail system was designed primarily to facilitate chimpanzee observation.

4. Infrastructure for facilitating sighting of birds and other fauna, such as observation towers, have been minimally implemented.

5. Tour guides have been well-trained in the natural history of the forest, but at least some of them could benefit from training in presentation and visitor management skills.

6. Operation of Kanyanchu by KNP appeared to be very informal; personnel were very friendly and helpful, but lacked uniforms; internal accounting of visitor fees did not appear to be adequate, and signs indicating the various fees were not visible. There is a good camping area, but most people camp in the parking area because vehicles do not have access to the established area. No brochure or other printed information was available, although two draft brochures for Kanyanchu have been prepared at different times by different people. The visitor center remains in a very preliminary stage of development. Infrastructure at Kanyanchu was constructed by Frontier, an English volunteer group, beginning in 1992. It does not appear to have been finished, and much remains to be done in order that the site become fully implemented.

7. Other sites for tourism activity within KNP have been suggested, but as yet no comprehensive survey or planning document has been developed which would orient future tourism activity.

8. For 1994, KNP is projected to generate about US\$5 million in entrance fees and other tourism derived income, with a total annual recurrent expenditure of US\$50.9 million. The entrance fee is currently established at US \$15 per person, and is collected only at Kanyanchu. It costs US \$6 per person to take the guided forest walk. Tourism numbers increased dramatically during the first two years of operation at Kanyanchu; in 1994, tourist numbers are up approximately 12% with a projected total of about 3,400 visitors.

9. UNP is placing a priority on income production, primarily through tourism related fees (concessions, entrance fees etc). As revenues rise, government budgetary support for UNP will be reduced.

10. Many feel that raising of the entrance fee to US \$15 in July 1994 has reduced tourism numbers.

### Conclusions

1. Even with the use of radio communication among guides, it is unreasonable to assure tourists that they will be able to see chimpanzees at Kanyanchu, or any other site in KNP. If the opportunity to observe chimpanzees is de-emphasized and bird, other primate and other natural history observation is promoted, combined with an increase in appropriate infrastructure and fee structure to facilitate this kind of tourism, the site would probably maintain a high level of tourism attraction.

2. A higher level of organization and professionalism at Kanyanchu, including uniforms, and better people management skills for guides, improved internal accounting of receipts, establishment of food service and improved visitor center, would also contribute to the attractiveness of the site for tourism. The camping situation also needs to be improved.

3. Tourism in KNP has developed in an ad hoc manner, successfully until the present time. Nevertheless, given KNP mandate to produce income, pressure from commercial interests, and the need to establish a competitive advantage with other tourism sites, it is time that tourism (and other KNP activities) be subjected to a greater level of organization and professionalism.

4. The fee structure is a potent tool for orienting future tourism activity.

## Recommendations

1. KNP must establish a firm reputation as a professionally organized, presented and managed tourism destination with a wide base of attractions if it is to compete successfully with other areas where primates are easily seen. It is ideally situated to do so. Part of this reputation should include a close tie with good community based lodging and eating facilities.
2. Before more tourism sites and/or activities are developed or altered, a comprehensive evaluation of the KNP's potential for tourism should be carried out, preferably as part of a park-wide management planning process, in order to determine the overall objectives of the KNP and assure that tourism finds its appropriate role within context of the other potential uses of the forest, e.g research, species and habitat protection, community use etc, and their respective environmental impacts.
3. Future planning for tourism should include consideration of the fee structure, which currently may be excessive, and a strategy for assuring that local villages benefit from this activity, as well as KNP, e.g. overlander camping at Kanyanchu be sent to Bigodi instead of the parking lot. Management of Kanyanchu should remain in KNP hands, and not be privatized. Concessions for food and other visitor services should be given to local communities.
- 6.3. *Examine the project's role and contribution to forest management, planning and activities undertaken in Kibale Forest before and after its classification as a national park; this will include but not be limited to: the monitoring, surveillance and suppression of illegal activities; MUBFS contributions in terms of on-going research; other research and inventory activities; awarding and management of the concessions for harvesting of softwood plantations; development and implementation of management plans.*

## Findings

1. The Project manager and MUBFS staff had a reasonable working relationship with the Forest Department, both because of research interests which supported applied management of softwood plantations, as well as compatible management and administrative styles.
2. The change from Forest Park (Forest Department) to national park status under UNP, and the resulting political controversy, created a very unsettled situation which has left its mark on some MUBFS personnel, and others. Acceptance and full cooperation with UNP personnel has not been optimal, in spite of the fact that the temporary vacuum which occurred in the interim period between Forest Department withdrawal and UNP entry to Kibale has largely been normalized.
3. The change from Forest Park status to National Park has meant little if any change in overall management of the forest. However, future management directions for KNP are unclear, since no management plan has been prepared. The Forest Department, together with MUBFS and Project staff, developed a 2 year Interim Forest Management Plan in 1992, which was partially implemented.
4. The soft wood plantations within KNP are presently being exploited by one commercial logger and two pit sawers, on a 5 year concession basis. The commercial logger is apparently the same one that became established there during the Forest Department management period, and has been there for several years; it has recently renewed its concession with UNP.



5. Management objectives regarding the harvesting of the softwood plantation have apparently changed as a result of the change in Kibale Forest administration. While the Forest Department seemed to have had a more sustainable harvest in mind, UNP's objective is to eliminate the softwoods so that natural regeneration will take place. Income generation is also a significant factor in UNP's decision to continue softwood harvesting.

6. Some actions have been taken by UNP to insure that harvesting by concessionaires does not significantly impede natural regeneration, but MUBFS research staff feel that these actions have either not been sufficient and that their research recommendations are not being followed. However, there does not appear to have been a concerted effort on MUBFS part to advise UNP in this matter, nor did evaluators encounter these recommendations in written form.

7. MUBFS staff research on wild coffee may lead to the development of a significant economic resource which could help both local communities and the KNP. Other research on crop raiding by forest animals may help KNP to develop policies and actions to deal with these problems. Both studies were begun under Forest Department administration of the forest. There may be problems with the accessibility of research results for management purposes. A formal arrangement between MUBFS and UNP in this regard does not exist.

8. UNP has little experience in managing forest environments and recognizes this limitation. While it has stated that it would welcome Forest Department collaboration in improving forest management, or in training of UNP officials, the friction between the two agencies continues to impede cooperative activities.

9. There is no evidence that illegal activity within the Kibale Forest is greater - or lesser - now than it was under Forest Department administration. Nevertheless, there are no clear indicators to utilize in making this determination. Patrolling activity, while not actually observed, is reported by some to be fairly well-organized and carried out with regular frequency, in spite of inadequate or non-existing ranger posts, vehicles and field equipment.

10. Neither the Project nor MUBFS personnel have made substantial direct contributions to improve UNP's effectiveness in managing the Park. Motorcycles have been provided to the extension warden, and all KNP personnel receive Project Performance Allowances. Construction and refurbishing of ranger posts and other KNP infrastructure has not occurred. Radios, vehicles and other equipment have not been purchased as yet, although provided for in the Cooperative Agreement (for the Forest Department).

11. Project effectiveness at supporting KNP has been impeded by the slowness of project funding disbursements and continued disagreements between WCS and USAID regarding project personnel selection.

12. The advisory role of MUBFS as foreseen by the Cooperative Agreement with regard to the forest's management occurred under Forest Department administration but has not yet materialized under UNP administration of the forest. A draft MOU between Makerere University and UNP has not yet been signed.

## Conclusions

1. The change in status from Forest Park to National Park has impeded all aspects of cooperation between the Project/MUBFS and KNP, although the situation is slowly changing as relationships develop between KNP and UNP personnel.
2. MUBFS staff do not seem to believe that they have a major role with regard to implementation of the National Park.
3. A rough transition period from Forest Department to UNP administration, and disagreements between WCS and USAID have impeded delivery of Project assistance to KNP.
4. The Project Performance Allowance is essential for maintaining adequate numbers and quality of UNP staff.

## Recommendations

1. It is essential that MUBFS and the Project take an long-term active role collaborating with KNP for improving the park's management. More research should be directed at resolving the park's major management problems, especially crop raiding, logged forest regeneration and obtaining a better idea of the population status of key animal species (e.g. chimpanzees, elephants). Monitoring of poaching levels and other illegal activity within the Park should be carried out.
  2. An clarified KNP-MUBFS relationship should be explicitly developed in an MOU and integrated into a park management plan. Regularly scheduled meetings should be carried out between KNP personnel and MUBFS researchers concerning use and application of research results to park management goals.
  3. The KNP should be urgently supplied with the equipment provided for by the Cooperative Agreement, subject to KNP's prior establishment of objectives and priorities for the park's management.
  4. The Project Performance allowance should be maintained in its present form, i.e. the Project should continue to fill the gap between a given salary level, and UNP's ability to pay that salary. Project assistance should gradually be phased out as UNP's salaries are increased.
- 6.4 *Examine the management involvement in the wildlife corridor, and identify recommendations for future areas of activity.*

## Findings

1. The game corridor has now become part of KNP. Because of its location as a corridor between Queen Elizabeth National Park and what used to be the Kibale Forest Park, this area is considered key to restoring appropriate movement of some species, especially elephants, between these two core areas.
2. At present no research or monitoring is being carried out in the area of the old wildlife corridor, although a Ugandan PhD student began elephant monitoring studies there, but never finished them.

3. Some local people are waiting for a change in the political climate in order to return to the good farmland in the corridor from which people were evicted in March, 1992. Old banana plantations remain in good condition there, and are still utilized by local people, and some wild animals, including chimps.
4. Other than occasional patrols, there is no management involvement in the wildlife corridor area, except for boundary surveying and boundary tree planting by the IUCN project.
5. The NGO FACE is currently planting exotic trees within the game corridor, apparently without coordination with UNP/KNP.

#### Conclusions

1. Management and research involvement in the wildlife corridor is totally inadequate given its strategic importance to the Park.
2. The lack of suitable infrastructure in the corridor area and its distance from Kanyawara and MUBFS are factors which impede greater research and management involvement in the corridor.

#### Recommendations

1. Projected ranger posts at Nyabitusi, Mpokya and perhaps another site should be developed and also include space for a researcher in order to encourage research in the game corridor.
2. MUBFS should make a greater effort to encourage research in this area, particularly with regard to elephant movements, and the role of banana plantations in encouraging or discouraging animal movement in the corridor.
3. MUBFS should make an effort to train KNP personnel in the monitoring techniques and procedures necessary to monitor animal presence and movement in the game corridor.
4. UNP should halt FACE's tree planting activity in the game corridor.
- 6.5. *Assess the institutional and economic sustainability of the in-forest/in park activities, past, present and future.*

See Section 3.3.2

## **7. SUMMARY AND PRINCIPAL RECOMMENDATIONS**

### **7.1 GENERAL ISSUES**

7.1.1 The Kibale Forest Project has had an ambitious agenda to help develop Ugandan capacity to manage the Kibale Forest (now Kibale National Park) and to nurture the continued development of the Makerere University Biological Field Station. This agenda was supported with substantial USAID/Kampala funding, but the implementation has been thwarted by numerous constraints: among them, very poorly defined and increasingly difficult relationships between collaborating institutions and project personnel, early departures of personnel from key project positions with very slow replacement, turnover in Ugandan institutional authority over the forest, and limited financial and institutional investment in the field station by Makerere University.

7.1.2 Despite these considerable challenges, several significant objectives have been achieved:

- Substantial infrastructure development at MUBFS, enhancing its capacity to serve as a center for tropical forest science research and training.
- Increasing levels of applied conservation research and training at the station, with substantial participation of Ugandan students and scientists.
- In and out park tourism development in place with local community benefits.
- Increased local support for forest conservation.

7.1.3 The imminent departure of WCS from the CA poses a critical challenge to the future of USAID support for research, training, conservation and outreach at Kibale National Park. What should USAID support, and how should that support be implemented? Currently, USAID is planning a "bridging period" of up to 12 months during which funding for Kibale is to be continued on an interim basis until a new project can be developed.

7.1.4 This evaluation has focussed on examining the strengths and weaknesses of the Kibale Forest Project. However, it is also a first step toward helping USAID/Kampala develop and carry out a strategy for future efforts to encourage biodiversity conservation and sustainable development in and around Kibale.

### **7.2 GENERAL RECOMMENDATIONS**

7.2.1 USAID/Kampala should continue to provide considerable support for biodiversity conservation in and around Kibale National Park following the termination of the cooperative agreement with WCS. Primary emphasis should be given to:

- research, training, infrastructure development and community environmental education at MUBFS, and
- capacity-building for UNP to sustainably manage Kibale National Park and develop support for the park in buffer-zone communities.

These should be treated as discrete activities and funded through two separate institutions (see below).

USAID/Kampala should allow these institutions considerably more leeway in selecting qualified senior personnel than was evidenced under the Kibale Forest Project. Organizations with recognized levels of performance strong enough to receive grants should be held accountable to high standards of output and allowed significant leeway regarding inputs utilized once the grant is approved.

7.2.2 During the up to 12-month bridge period, USAID funding should be primarily directed toward facilitating a well thought-out design of follow-on activities; this should be arrived at through a flexible, deliberative planning process. USAID funding for MUBFS should be relatively modest and directed toward (1) maintaining essential research and training facilities and activities, including field courses, and (2) providing necessary improvements in station infrastructure (e.g. electricity, water supply, dormitories, latrines). These activities are realistically achievable under an interim management structure at MUBFS; they also are essential for MUBFS to continue hosting the field courses that are beginning to generate substantial revenue and provide valuable research and training benefits. Funding for new or expanded applied research and monitoring programs should be postponed until after the bridge period, when UNP and MUBFS goals are developed and technical expertise is in place. Priorities and timetables for applied research and monitoring should be developed collaboratively between Makerere University and UNP/KNP, and incorporated into both an MOU between these institutions and a park management plan.

### **7.3 MAKERERE UNIVERSITY BIOLOGICAL FIELD STATION**

7.3.1 USAID/Kampala support for MUBFS will likely be directed through Makerere University during the bridging period. Therefore, Makerere University should substantially strengthen its financial, technical and administrative support for MUBFS. This should include, for example, hiring a MUBFS senior administrator. Makerere should also consider also bringing MUBFS directly under the administrative auspices of an existing university institution, such as MUIENR.

7.3.2 To support MUBFS beyond the bridge, Makerere University should form a partnership with one or more qualified universities (and, perhaps, conservation NGO's) dedicated to furthering research and training in tropical forest conservation. This consortium should provide strong backstopping to MUBFS personnel in fundraising (from other sources in addition to USAID), public relations and management. USAID's continued support for MUBFS beyond the bridge should be conditioned upon (1) the development of an appropriate institutional partnership, and (2) some direct financial support by Makerere University into the running of the field station. The consortium also should:

- Hire a single MUBFS station director, rather than retain the two station co-director positions currently in place. The director should have a strong background in tropical forest science, superb leadership and management skills, significant international experience and the necessary vision to guide the further development of MUBFS as the leading center for tropical forest research and training in Africa.
- Hire a senior social scientist to conduct and oversee socioeconomic assessments of local community use of and impacts on forest resources. MUBFS should continue to have staff expertise in zoology and botany. MUBFS research staff should have minimal administrative responsibilities and maintain demonstrable productivity in research and training.
- Use MUBFS research priorities to set objectives for MUBFS research staff, but not for

Ugandan students or externally-funded researchers. Such priorities should appropriately continue to focus primarily on management-oriented research but be expanded to include applied conservation research in other critical habitats in the proximity of Kibale National Park. Priorities should be periodically reviewed and modified as needed as future research needs are collaboratively identified through the development of a park management plan.

- Guide a restructured Research Subcommittee to very actively solicit and support research proposals, particularly from Ugandan and other African students and scientists, independently of whether the proposed studies lie within the circumscribed boundaries of the station's research priorities. An annual research grant budget US \$50,000 is probably sufficient. The Research Subcommittee should facilitate more collaborative/mentoring relationships between applicants and MUBFS research staff and other qualified Ugandan and expatriate scientists.
- Develop an MOU with UNP to clarify the relationship between the KNP and MUBFS. The MOU should enable the field station to actively meet long-term conservation research and training objectives while also assisting KNP in meeting short-term park management goals.
- Develop sufficient infrastructure and administrative capacity to handle several 4-6 week field courses of up to 30 participants each year. The most immediate infrastructure needs at Kanyawara include (1) better electricity supply and wiring to accommodate computer use, (2) improvements to dormitories (better furniture, mosquito proofing), (3) the development of an adequate running water supply and (4) improvement of latrines. Infrastructure improvements at the Ngogo site may also be necessary to accommodate field courses.

7.3.3 USAID continued support for MUBFS beyond the next 12 months should be conditioned upon (1) the development of an appropriate institutional partnership as described above and (2) some direct financial support by Makerere University for the research station.

## **7.4 PARK MANAGEMENT AND OUTREACH/EXTENSION**

7.4.1 During the bridge, UNP should begin preparation of a KNP management plan. A core planning team of no more than three people should design a planning process that actively involves park personnel, natural and social scientists with KNP and park buffer zone experience, relevant public and private institutions, and representatives from buffer zone communities. The management plan should play a key role in determining to what degree tourism should be developed in KNP and what role it can and should play in generating income for KNP administration. A nature tourism specialist should therefore be a member of the core-planning team. A baseline planning document should be produced with ca. 6-8 months; however, the planning process should be dynamic, with issues and details re-examined and specified in an ongoing, consultative manner.

7.4.2 Beyond the bridge, support for KNP should be provided through UNP, probably in collaboration with an NGO (e.g. IUCN) with technical expertise in forest park management and community-based tourism/environmental education. USAID should provide medium to long-term support for a senior technical advisor to KNP with park management and nature tourism development expertise.

7.4.3 UNP must take a more visible and participatory role in future KNP related in-park and out-park activities. Maintaining the future ecological integrity of the KNP will require:

- Substantial short to medium term economic and technical support for KNP, in order to consolidate the park's administration and its ability to deal with park management problems. UNP with USAID assistance should consider developing Kibale as a model forest park. Medium to long-term assistance should be conditioned on the presence of an appropriate Ugandan counterpart as Senior Warden, with some assurance that s/he will remain in that position for a significant period of time.
- The development of significant positive relationships with local communities in the park's buffer zone. The KFP and IUCN have made significant steps in this direction; these must become institutionalized in order that these relationships be sustainable. KNP rangers/extensionists should be trained to provide conservation education, help find solutions to park-related community problems, and provide basic extension activities such as soil conservation and tree planting.

7.4.4 USAID should continue to support community-based tourism in Kibale. This should include primarily consolidation and improvement of the Kanyanchu and Bigodi projects. Future community-based tourism continue to be linked to in-park tourism sites. Support for community based conservation activities carried out at crater lakes Nkuruba and Lyantonde, as well as community conservation education and associated tree planting activities should also continue.

7.4.5 KNP should increase its presence in the southern part of the park (old wildlife corridor) to improve law enforcement and wildlife monitoring. Consideration should be given to providing ranger posts with additional space for a researcher.

7.4.6 Support should be continued for those IUCN extension activities that seek to reduce human pressure on the Kibale National Park through the involvement of local communities in sustainable resource management.

## **7.5 LESSONS LEARNED**

As a consequence of our experience evaluating this project, the team has developed three general "lessons learned" that are presented for consideration for both the implementors of follow-on work at Kibale and a wider audience. It is hoped that they will be the basis for constructive dialogue by all relevant parties.

7.5.1 All grants and cooperative agreements, and particularly those involving NGO's, need to have in place an administrative unit with sufficient expertise to handle the project's financial and management oversight requirements. These should be anticipated by the grant's size and complexity. If such capabilities are lacking, then the grantor should expand the project to include such a unit. Further, the grantee should be strongly encouraged to establish a country representative where none exists to handle projects of significant size and complexity.

7.5.2 Regardless of the desirability of funding an activity, no grant should be made until adequate management systems of both the grantor and grantee are ready to be put into place. Missions should not attempt to internally manage a grant without sufficient staff; if numerous, similar grants are

anticipated, then it is highly appropriate to develop a grants management unit.

7.5.3 A clear and common understanding on the part of both the grantor and the grantee of the interpretation of USAID "substantive involvement" is critical. This should be established, at a minimum, through dialogue and negotiation at the outset of Cooperative Agreements. Missions should allow grantees considerable leeway in selecting qualified personnel while maintaining high standards of accountability with respect to project performance and output.



## ANNEXES

### **I. EVALUATION SCOPE OF WORK**

#### **A. STATEMENT OF WORK**

Using the information contained in sections I and II of the Cooperative Agreement and its amendments as guidance, the following evaluation components should be considered and addressed in the evaluation team's report. The team will also be expected to use its professional judgement with respect to additional elements they may wish to add in their assessment and with the Mission concurrence to their report.

- Look at the formal and informal institutional relationships that exist between the Makerere University Biological Field Station (MUBFS), Makerere University, the Kibale Forest Project, the Wildlife Conservation Society (WCS), the Forestry Department, Uganda National Parks, the Grants Management Unit (GMU), and USAID/Kampala. This will include, but not be limited to how the separate institutions interact and communicate, any resultant impacts on the overall implementation of the Kibale Forest Project and/or MUBFS activities, and if necessary, identify steps to be taken to improve any existing or perceived institutional problems.
- Examine the project and field station management systems, including the management committee, the research committee, the Kibale Forest Project management team, and established group dynamics that exist and their effect on project implementation; assess the project management and administration capacities, and identify techniques for strengthening them if necessary;
- Assess the potential for overall long-term sustainability of the activities being initiated and supported by MUBFS, UNP and the project; and
- Assess the project's impact vis a vis USAID's Strategic Objective #2, i.e. the conservation of biological diversity.
- Examining the linkages between MUBFS, Makerere University, WCS, the Uganda National Parks (including UIE), and former linkages with the Forestry Department in relation to research, inventory and training;
- Assess whether research priorities are clearly identified and in place. Are they well known, and common knowledge, or readily available to outside researchers;
- Examine and assess the quality, relevance and accessibility of the research that has been done to date, opportunities for future research (funding, international relevance and interest, possible new areas), and problems that may have, are or may be developing;
- Examine the current state of the field courses, how they have developed and

how they may develop in the future. How relevant are the field course subjects, and types of field courses given, to the overall research priorities as identified by MUBFS, Makerere, UNP and UIE; and

- Assess the sustainability, both institutional and economic of the MUBFS program. What is the long-term viability of the program if outside donor funding is no longer available? Are the various field course fees appropriate based upon internationally accepted standards and practices? Are any other fees and overhead charges appropriate? What steps can be taken to enhance long-term sustainability?
- Examine the overall extension and outreach program, including the 'Open House' program as well as the out-park activities;
- Examine the agroforestry and individual farmer/household outreach activities for relevance, practicability, and results. Identify promising directions for further action;
- The CA calls for the outreach program to eventually be turned over to GOU agencies and the IUCN's Kibale-Semliki Project. Assess whether this "handing over" should proceed as proposed in the CA, and examine the sustainability issues related to the various options; including
  - a) Assess the general IUCN project's outreach activities and methodologies, compared to the activities and methodologies used under the Kibale Forest Project;
  - b) Examine the MUBFS past and present contribution to the outreach program, and its possible role in future outreach activities, whether housed with the IUCN or the Kibale Forest Project;
- Examine the out-park village-level tourism program, its present and possible future impact on the local economy and social structure (sustainability), and assess future opportunities, given the local constraints; and
- Assess linkages and levels of cooperation/ information dissemination between the Field Station research and the Outreach/Extension activities.
- Examine the project's role and contribution to forest management planning and activities undertaken in Kibale Forest before and after its classification as a national park; this will include but not be limited to:
  - the monitoring, surveillance and suppression of illegal activities; MUBFS contributions in terms of on-going research; other research and inventory activities; awarding and management of the concessions for harvesting of softwood plantations; development and implementation of management plans;
- Examine the management involvement in the wildlife corridor, and identify recommendations for future areas of activity;

- Assess the institutional and economic sustainability of the in-forest/in-park activities, past, present, and future;
- Assess the in-park tourism development activities, and assess the possible future directions under UNP's mandate;

## B. METHODS AND PROCEDURES

The Kibale Forest Project evaluation will take place in October, 1994. The evaluation will be undertaken in accordance with the provisions of the Cooperative Agreement which is a regular part of USAID project monitoring and oversight.

The AID Project Officer will prepare a preliminary travel and study program for the evaluation team's guidance during the first week in Uganda.

The team will follow the format and guidelines established by USAID in the supplement to Chapter 12, AID Handbook 3, Project Assistance, Entitled, "AID Program Design and Evaluation Methodology Report No. 7". The team will use the following data collection and interview methods:

1. Review the Relevant Cooperative Agreement, revisions, periodic reports and previous evaluation and impact assessment reports.
2. Interview and discussions with representatives of all of the organizations involved in the project and examination of their activity records, data analysis and conclusions. Review of the financial statements and audits of the participating organizations.

## C. COMPOSITION OF TEAM:

A four person evaluation team will include the following types of individuals:

- **Team Leader**

This individual should have the following qualification:

1. Prior USAID project design, evaluation and implementation experience
2. Preferably have prior USAID project management experience in Africa; and
3. Strong analytical and communication skills, with a demonstrated ability to quickly prepare clear, concise, analytical reports.

- **Research Management Specialist/Scientist**

This individual should have the following qualifications:

1. A PhD is mandatory in one of the relevant biological, natural or social sciences;
2. Prior experience, associated with a field research institution or field station;

3. Prior experience in developing and managing diverse research programs, identifying and establishing research priorities, identifying international funding sources, and developing of field course linkages with other international institutions;
  4. Experience in providing guidance to under-graduate and graduate students in preparation and implementation of field research activities; and
  5. Prior USAID project evaluation experience;
- **Outreach Specialist - Conservation Outreach and Forestry/Agroforestry Extension PROGRAM**

This individual must have the following qualifications

1. Extensive African experience in outreach and extension, including;
    - a) field-level implementation; hands-on experience as a forestry/agroforestry extension and/or conservation outreach specialist;
    - b) Forestry/Agroforestry program development, planning and implementation;
    - c) Conservation education program development and implementation;
  2. Prior USAID project evaluation experience; and
  3. A University degree in social forestry, extension, or a related field.
- **Forest Management/In-Forest Specialist - Kibale Forest Management and Park Management**
1. Msc or PhD in Forest Management, Park management, or a related field;
  2. Prior project evaluation experience
  3. Prior project implementation experience in tropical forest and/or park development and management, preferably in Africa;

#### D. REPORTING REQUIREMENTS

The format of the evaluation will follow AID guidelines established in the supplement of Chapter 12 of AID Handbook 3 and will include an executive summary, a table of contents, the body of the report, and appropriate appendices (e.g the Evaluation Scope of Work, List of Interviews, Bibliography).

The report will be written jointly by the evaluation team under the coordination of the team leader who will be responsible for the ultimate content of the report. The team leader will also be responsible for debriefing USAID and for the submission of the final evaluation document.

A draft of the evaluation report will be submitted to USAID 5 days prior to the departure of the team leader. Following the submission of comments by USAID to the team leader, the team leader will finalize the report prior to departure from Uganda. The Contractor shall submit ten copies of the final report to USAID/Kampala.

## II. INDIVIDUALS INTERVIEWED

David Abura, Ministry of Tourism, Wildlife and Antiquities  
Rwetsiba Aggwey, Kibale National Park  
Thomas Akora, Kibale National Park  
Mugisha Arthur, Kibale National Park, UNP  
Apophia Atukunda, Uganda National Parks  
Gary Bayer, USAID/Kampala  
Gary Bombardier, DAA, USAID Africa Bureau  
Colin Chapman, University of Florida  
Donald Clark, Director, USAID/Kampala  
Rob Clausen, USAID/Kampala  
Leticia Diaz, Deputy Director, USAID/Kampala  
Peter Downs, USAID/Washington  
Leroy Duvall, Grants Management Unit, APE  
Justin Epelu-Opio, Deputy Vice-Chancellor, Makerere University  
Alex Forbes, IUCN-Kampala  
Gil Isibirye-Basuta, MUBFS, Makerere University  
Happy James Tumbewaze, Ministry of Finance and Planning  
Isaac Kapalaga, Forest Department  
John Kasenene, MUBFS, Makerere University  
Fred Kigenyi, Forest Department  
Robert Kityo, Makerere University  
Tinka John, KAFRED  
Andrew Johns, Former WCS Co-director, MUBFS  
Kathleen LeBlanc, USAID/Kampala  
Lysa Leland, Consultant to WCS  
Dr. Murum, Faculty of Science, Makerere University  
Alex Muhweezi, IUCN  
Monica Mitchell, Peace Corps  
Vincent Okalang, Kibale National Park  
Joseph Otekat, Uganda National Parks  
Rolf Posthouwer, IUCN, KSCDP  
Tony Pryor, USAID/Washington  
Graham Reid, Kibale Forest Project  
Tim Resch, USAID/Washington  
Alan Robinson, USAID-Uganda National Parks  
John Robinson, Wildlife Conservation Society  
Abby Sebina-Zziwe, MISR, Makerere University  
Robert Senkungu, Kibale National Park  
Jim Seyler, APE, USAID  
Keith Sherper, former Director, USAID/Kampala  
Eldad Tukahirwa, MUIENR, Makerere University  
Bill Weber, Wildlife Conservation Society  
Amy Vedder, Wildlife Conservation Society  
Ray Victorine, Grant Management Unit, APE

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